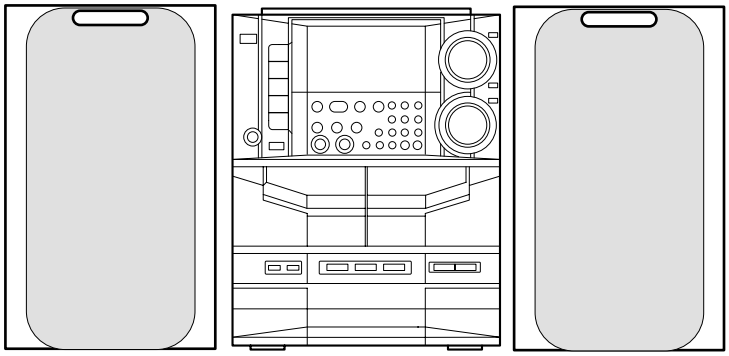
aiwa SERVICE

NSX-HMA86 U



SERVICE MANUAL

COMPACT DISC STEREO
CASSETTE RECEIVER

BASIC TAPE MECHANISM : 2ZM-3MK2 PR7NM
BASIC CD MECHANISM : AZG-1 ZD3RNDM

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX–HMA86	CX–NHMA86	SX–WNAJ86 SX–R275 SX–C605	RC–ZAS05

• If requiring information about the CD mechanism, see Service Manual of AZG-1 ZD3RNDM, (S/M Code No. 09-001-335-3N8).

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S/M Code No. 09-005-428-3R1

SPECIFICATIONS

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<AM tuner section>

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<Amplifier section>

Mid-high frequency amplifier	**Front**
Power output	30 W + 30 W (200 Hz - 20 kHz, T.H.D. less than 1 %, 8 ohms)
Total harmonic distortion	0.1 % (25 W, 1 kHz, 8 ohms, DIN AUDIO)
Low frequency amplifier	
Power output	90 W + 90 W (50 Hz - 200 Hz, T.H.D. less than 1 %, 6 ohms)
Total harmonic distortion	0.1 % (75 W, 120 Hz, 6 ohms, DIN AUDIO)
	Rear (Surround)
	33 W + 33 W (1 kHz, T.H.D. less than 1%, 8 ohms)
	Center
	34 W (1 kHz, T.H.D. less than 1 %, 8 ohms)
Inputs	VIDEO/AUX: 316 mV (adjustable) MD: 316 mV (adjustable) MIC 1, MIC 2: 1 mV (10 k ohms) 5.1 CH INPUT (adjustable) FRONT (L,R): 230 mV REAR (L,R): 230 mV CENTER: 420 mV SUB WOOFER: 230 mV
Outputs	SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms tor more SUBWOOFER: 1.1 V LINE OUT: 210 mV PHONES (stereo jack): accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape: 50 Hz – 16000 Hz NORMAL tape: 50 Hz – 15000 Hz
Recording system	AC bias
Heads	Deck 1: Playback head x 1 Deck 2: Recording/Playback head x 1, erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<General>

Power requirements	120 V AC, 60 Hz
Power consumption	210 W
Power consumption in standby mode	If the power-economizing mode is ECO OFF: 28 W If the power-economizing mode is ECO ON or ECO AUTO: 0.9 W
Dimensions (W x H x D)	260 x 329 x 389.6 mm (10 1/4 X 13 X 15 3/8 in.)
Weight	11.8 kg (26 lbs.)

<Speaker system SX–WNAJ86>

Speaker system	3 way, built-in subwoofer (magnetic shielded type)
Speaker units	Subwoofer: 200 mm (7 7/8 in.) cone type Full range: 120 mm (4 3/4 in.) cone type Super tweeter: 20 mm (13/16 in.) ceramic type
Impedance	6 ohms/8 ohms
Sensitivity	87 dB/W/m
Dimensions (W x H x D)	240 x 324 x 285 mm (9 1/2 X 12 7/8 X 11 1/4 in.)
Weight	5.7 kg (12 lbs 9 oz.)

• Design and specifications are subject to change without notice.

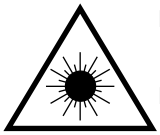
• Manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY", the double-D symbol ◨◧ and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

• The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
Under license from BBE Sound,Inc.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

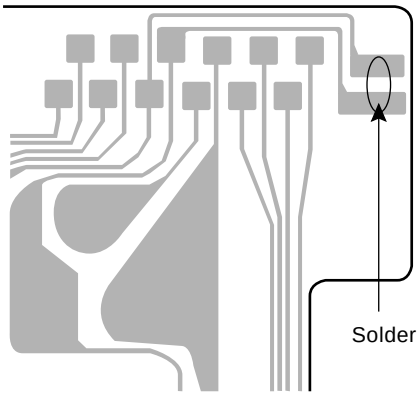
Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

PICK-UP Assy P.C.B



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

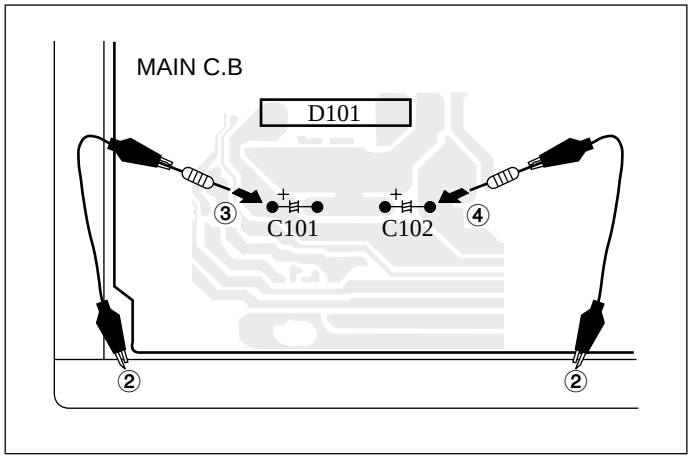


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

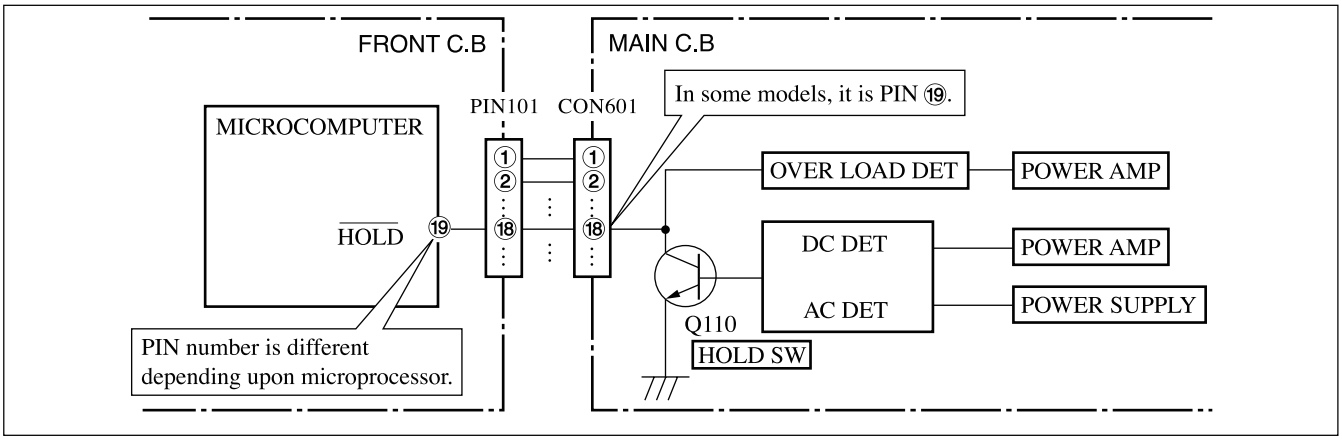


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

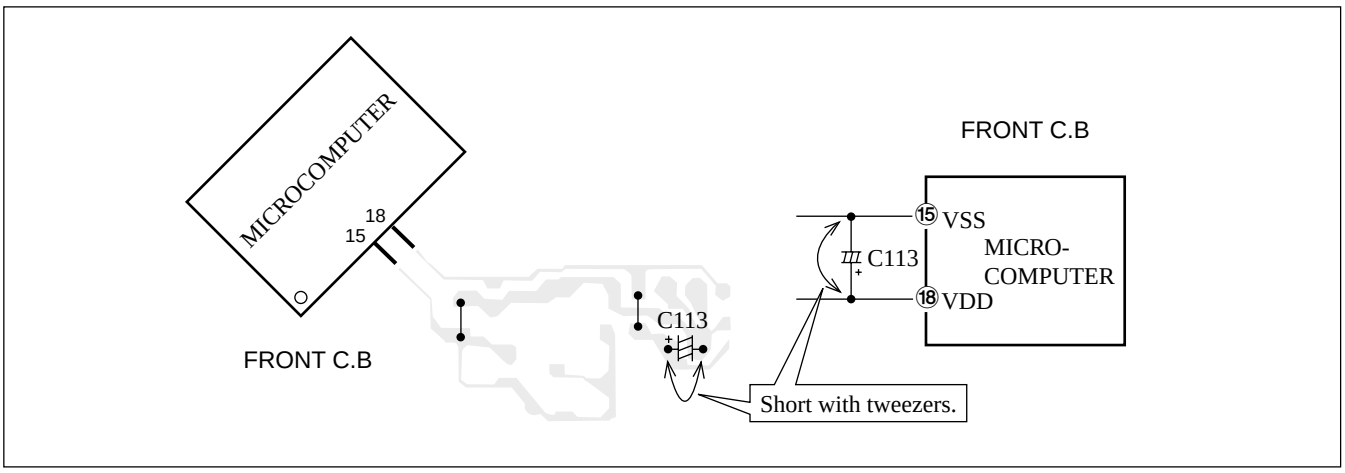


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-NF6-605-130		C-IC,LC876572V-5P63
	87-A21-418-010		IC,STK490-340
	87-A21-397-010		IC,STK490-070
	87-A20-914-010		IC,SPS-442-1-F
	87-A20-783-040		C-IC,BA7762AFS
	87-A21-577-040		C-IC,M61506FP
	87-A21-021-040		C-IC,BU2099FV
	87-070-289-040		IC,BU 2092F
	87-A21-452-030		C-IC,BD3876KS2
	87-A21-560-010		IC,LA1844L-A
	87-070-127-110		IC,LC72131 D
	87-020-454-010		IC,DN 6851
	87-A21-097-040		C-IC,M62463AFP
	87-A21-015-040		C-IC,M62491FP
TRANSISTOR			
	87-026-245-080		TR,DTC114ES
	87-A30-075-080		C-TR,2SA1235F
	87-A30-318-080		TR,CSA952K
	89-213-702-010		TR,2SB1370 (1.8W)
	87-A30-105-080		C-TR,RT1P441C
	87-A30-076-080		C-TR,2SC3052F
	87-026-610-080		TR,KTC3198GR
	87-026-609-080		TR,KTA1266GR
	87-A30-087-080		C-FET,2SK2158
	87-A30-107-070		C-TR,CMBT5401
	87-A30-468-080		C-TR,KRC102S-RTK
	87-A30-074-080		C-TR,RT1P141C
	87-A30-269-040		C-FET,2SJ461-T1
	87-A30-106-040		C-TR,CMBT5551
	87-A30-256-010		TR,2SD1933
	87-A30-190-080		TR,CC5551
	87-A30-063-080		C-TR,KRA104S
	87-A30-086-070		C-TR,CSD1306E
	87-A30-255-010		TR,2SB1342
	87-A30-329-080		TR,CD1585BC
	89-327-143-080		TR,2SC2714 (0.1W)
	87-A30-489-080		C-TR,KRA107S
	87-A30-234-080		TR,CSC4115BC
	87-026-463-080		TR,2SA933S
DIODE			
	87-A40-673-090		DIODE,D10XB20
	87-020-465-080		DIODE,1SS133
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-784-080		ZENER,UZ39BSB
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-313-080		C-DIODE,MC 2840
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-768-080		ZENER,UZ16BSA
	87-A40-752-080		ZENER,UZ6.2BSC
	87-A40-760-080		ZENER,UZ9.1BSA
	87-A40-802-080		ZENER,UZ5.1BSC
	87-A40-747-080		ZENER,UZ5.1BSB
	87-A40-745-080		ZENER,UZ4.7BSA
	87-017-149-080		ZENER,HZS6A2L
	87-A40-535-080		DIODE,IN5393-GOODARK
	87-A40-754-080		ZENER,UZ6.8BSC
MAIN C.B			
C3	87-012-368-080		C-CAP,S 0.1-50 F
C4	87-012-368-080		C-CAP,S 0.1-50 F
C21	87-016-658-000		CAP,E 4700-35 M SMG
C22	87-016-658-000		CAP,E 4700-35 M SMG
C25	87-010-406-080		CAP, ELECT 22-50V
C26	87-010-406-080		CAP, ELECT 22-50V
C27	87-010-406-080		CAP, ELECT 22-50V
C28	87-010-406-080		CAP, ELECT 22-50V
C31	87-010-263-080		CAP, ELECT 100-10V
C32	87-010-197-080		CAP, CHIP 0.01 DM
C33	87-010-263-080		CAP, ELECT 100-10V
C34	87-010-247-080		CAP, ELECT 100-50V
C35	87-010-260-080		CAP, ELECT 47-25V
C36	87-010-381-080		CAP, ELECT 330-16V
C38	87-010-247-080		CAP, ELECT 100-50V
C39	87-010-247-080		CAP, ELECT 100-50V
C40	87-010-197-080		CAP, CHIP 0.01 DM
C60	87-010-403-080		CAP, ELECT 3.3-50V
C80	87-010-401-080		CAP, ELECT 1-50V
C81	87-010-379-080		CAP, ELECT 22-16V
C82	87-010-260-080		CAP, ELECT 47-25V
C104	87-010-196-080		CHIP CAPACITOR,0.1-25
C105	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-010-545-080		CAP, ELECT 0.22-50V
C112	87-010-545-080		CAP, ELECT 0.22-50V
C113	87-010-545-080		CAP, ELECT 0.22-50V
C114	87-010-545-080		CAP, ELECT 0.22-50V
C115	87-010-546-080		CAP, ELECT 0.33-50V
C116	87-010-546-080		CAP, ELECT 0.33-50V
C121	87-010-546-080		CAP, ELECT 0.33-50V
C152	87-010-260-080		CAP, ELECT 47-25V
C122	87-010-546-080		CAP, ELECT 0.33-50V
C171	87-012-368-080		C-CAP,S 0.1-50 F
C172	87-012-368-080		C-CAP,S 0.1-50 F
C173	87-012-368-080		C-CAP,S 0.1-50 F
C174	87-012-368-080		C-CAP,S 0.1-50 F
C301	87-010-318-080		C-CAP,S 47P-50 J CH
C302	87-010-318-080		C-CAP,S 47P-50 J CH
C303	87-012-157-080		C-CAP,S 330P-50 CH
C304	87-012-157-080		C-CAP,S 330P-50 CH
C305	87-012-157-080		C-CAP,S 330P-50 CH
C306	87-012-157-080		C-CAP,S 330P-50 CH
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C309	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-198-080		CAP, CHIP 0.022
C312	87-010-198-080		CAP, CHIP 0.022
C313	87-010-179-080		CAP,CHIP S B1200P
C314	87-010-179-080		CAP,CHIP S B1200P
C315	87-010-179-080		CAP,CHIP S B1200P
C316	87-010-179-080		CAP,CHIP S B1200P
C321	87-012-142-080		CAP, S 0.33-16
C322	87-012-142-080		CAP, S 0.33-16
C324	87-010-260-080		CAP, ELECT 47-25V
C325	87-010-370-080		CAP,E 330-6.3 SME
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-010-401-080		CAP, ELECT 1-50V
C337	87-010-196-080		CHIP CAPACITOR,0.1-25
C339	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-012-140-080		CAP 470P
C352	87-012-140-080		CAP 470P
C354	87-010-175-080		CAP 560P
C355	87-010-178-080		CHIP CAP 1000P
C356	87-010-260-080		CAP, ELECT 47-25V
C357	87-010-197-080		CAP, CHIP 0.01 DM
C358	87-010-183-080		C-CAP,S 2700P-50 B
C359	87-010-183-080		C-CAP,S 2700P-50 B
C360	87-010-183-080		C-CAP,S 2700P-50 B
C370	87-010-196-080		CHIP CAPACITOR,0.1-25
C373	87-016-083-080		C-CAP,S 0.15-16 RK
C374	87-016-083-080		C-CAP,S 0.15-16 RK

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C378	87-010-196-080		CHIP CAPACITOR,0.1-25
C379	87-010-382-080		CAP, ELECT 22-25V
C380	87-010-382-080		CAP, ELECT 22-25V
C381	87-010-197-080		CAP, CHIP 0.01 DM
C382	87-010-312-080		C-CAP,S 15P-50 CH
C383	87-010-197-080		CAP, CHIP 0.01 DM
C384	87-010-402-080		CAP, ELECT 2.2-50V
C386	87-010-196-080		CHIP CAPACITOR,0.1-25
C387	87-012-145-080		CAP, CHIP S 270P CH
C388	87-012-156-080		C-CAP,S 220P-50 CH
C391	87-010-319-080		C-CAP,S 56P-50 CH
C392	87-010-319-080		C-CAP,S 56P-50 CH
C393	87-010-319-080		C-CAP,S 56P-50 CH
C394	87-010-319-080		C-CAP,S 56P-50 CH
C401	87-010-176-080		C-CAP,S 680P-50 SL
C402	87-010-176-080		C-CAP,S 680P-50 SL
C403	87-010-958-080		CHIP -CAP,S 0.01-25BJ
C404	87-010-958-080		CHIP -CAP,S 0.01-25BJ
C405	87-010-958-080		CHIP -CAP,S 0.01-25BJ
C406	87-010-958-080		CHIP -CAP,S 0.01-25BJ
C407	87-010-401-080		CAP, ELECT 1-50V
C408	87-010-401-080		CAP, ELECT 1-50V
C409	87-010-196-080		CHIP CAPACITOR,0.1-25
C410	87-010-384-080		CAP, ELECT 100-25V
C411	87-010-401-080		CAP, ELECT 1-50V
C412	87-010-401-080		CAP, ELECT 1-50V
C413	87-010-401-080		CAP, ELECT 1-50V
C414	87-010-401-080		CAP, ELECT 1-50V
C415	87-010-546-080		CAP, ELECT 0.33-50V
C416	87-010-546-080		CAP, ELECT 0.33-50V
C417	87-010-221-080		CAP, ELECT 470-10V
C418	87-A10-891-080		CAP,E 4.7-25 SME(K)
C419	87-A10-800-080		C-CAP,S 6800P-16 J B CM
C420	87-010-374-080		CAP, ELECT 47-10V
C421	87-010-196-080		CHIP CAPACITOR,0.1-25
C422	87-A10-804-080		C-CAP,S 0.1-25 J B
C424	87-010-374-080		CAP, ELECT 47-10V
C425	87-010-196-080		CHIP CAPACITOR,0.1-25
C428	87-012-156-080		C-CAP,S 220P-50 J CH
C429	87-010-545-080		CAP,E 0.22-50 V
C430	87-A10-201-080		CAP, S 0.33-16K B
C431	87-010-971-080		C-CAP,S 4700P-50 B J
C432	87-012-349-080		CHIP CAP 1000P-50 J CH
C433	87-A11-183-080		C-CAP,S 0.12-16 J B
C434	87-A11-182-080		C-CAP,S 0.27-16 J B
C435	87-A11-182-080		C-CAP,S 0.27-16 J B
C436	87-A11-183-080		C-CAP,S 0.12-16 J B
C437	87-010-971-080		C-CAP,S 4700P-50 B J
C438	87-012-349-080		CHIP CAP 1000P-50 J CH
C439	87-010-805-080		CAP, S 1-16
C440	87-010-401-080		CAP, ELECT 1-50V
C441	87-A10-799-080		C-CAP,S 5600P-16 J B CM
C442	87-A10-802-080		C-CAP,S 0.047-16 J B CM
C443	87-A10-229-080		C-CAP,S 0.68-10 K W5
C444	87-012-393-080		C-CAP,S 0.22-16 K
C445	87-012-393-080		C-CAP,S 0.22-16 K
C446	87-010-404-080		CAP, ELECT 4.7-50V
C447	87-010-404-080		CAP, ELECT 4.7-50V
C448	87-012-393-080		C-CAP,S 0.22-16 K
C449	87-012-393-080		C-CAP,S 0.22-16 K
C450	87-016-669-080		C-CAP,S 0.1-25 K B
C451	87-A10-802-080		C-CAP,S 0.047-16 J B CM
C452	87-A10-802-080		C-CAP,S 0.047-16 J B CM
C453	87-016-669-080		C-CAP,S 0.1-25 K B
C454	87-016-669-080		C-CAP,S 0.1-25 K B
C455	87-A10-801-080		C-CAP,S 0.022-16 J B CM
C456	87-A10-801-080		C-CAP,S 0.022-16 J B CM
C457	87-016-669-080		C-CAP,S 0.1-25 K B
C461	87-010-196-080		CHIP CAPACITOR,0.1-25
C463	87-010-196-080		CHIP CAPACITOR,0.1-25
C465	87-016-552-080		CHIP-CAPACITOR,0.082-16K B
C466	87-010-194-080		CAP, CHIP 0.047
C467	87-A10-201-080		C-CAP,S 0.33-16 KB
C468	87-A10-060-080		C-CAP,S 0.18-16 K B
C472	87-012-140-080		C-CAP,S 470P-50 J CH
C473	87-012-140-080		C-CAP,S 470P-50 J CH
C474	87-012-140-080		C-CAP,S 470P-50 J CH
C475	87-012-140-080		C-CAP,S 470P-50 J CH
C476	87-012-140-080		C-CAP,S 470P-50 J CH
C477	87-012-140-080		C-CAP,S 470P-50 J CH
C478	87-010-401-080		CAP, ELECT 1-50V
C479	87-010-179-080		CAP,CHIP S B1200P
C480	87-010-179-080		CAP,CHIP S B1200P
C481	87-010-179-080		CAP,CHIP S B1200P
C482	87-010-179-080		CAP,CHIP S B1200P
C489	87-010-402-080		CAP, ELECT 2.2-50V
C491	87-010-402-080		CAP, ELECT 2.2-50V
C492	87-010-402-080		CAP, ELECT 2.2-50V
C531	87-010-405-080		CAP, ELECT 10-50V
C532	87-010-196-080		CHIP CAPACITOR,0.1-25
C533	87-010-196-080		CHIP CAPACITOR,0.1-25
C534	87-012-156-080		C-CAP,S 220P-50 CH
C535	87-010-178-080		CHIP CAP 1000P
C536	87-010-196-080		CHIP CAPACITOR,0.1-25
C541	87-010-178-080		CHIP CAP 1000P
C609	87-010-181-080		CAP,CHIP S 1800P
C610	87-010-181-080		CAP,CHIP S 1800P
C611	87-010-956-080		CHIP-CAP,S 0.068-25B
C612	87-016-369-080		C-CAP,S 0.033-25 B K
C613	87-A11-567-080		C-CAP,S 0.01-50K B
C614	87-016-669-080		C-CAP,S 0.1-25 K B
C616	87-010-184-080		CHIP CAPACITOR 3300P(K)
C617	87-012-369-080		C-CAP,S 0.047-50F
C618	87-010-401-080		CAP, ELECT 1-50V
C619	87-010-263-080		CAP, ELECT 100-10V
C620	87-016-669-080		C-CAP,S 0.1-25 K B
C621	87-A11-567-080		C-CAP,S 0.01-50K B
C623	87-010-401-080		CAP, ELECT 1-50V
C624	87-010-401-080		CAP, ELECT 1-50V
C626	87-A11-590-080		CAP, S 0.047-16
C627	87-010-400-080		CAP, ELECT 0.47-50V
C628	87-010-400-080		CAP, ELECT 0.47-50V
C629	87-A11-590-080		CAP, S 0.047-16
C630	87-010-383-080		CAP, ELECT 33-25V
C631	87-010-185-080		C-CAP,S 3900P-50 B
C632	87-010-185-080		C-CAP,S 3900P-50 B
C634	87-010-196-080		CHIP CAPACITOR,0.1-25
C635	87-A10-307-080		CAP,M 0.1-50 J
C636	87-A10-307-080		CAP,M 0.1-50 J
C637	87-A10-307-080		CAP,M 0.1-50 J
C638	87-A10-307-080		CAP,M 0.1-50 J
C639	87-010-405-080		CAP, ELECT 10-50V
C641	87-010-401-080		CAP, ELECT 1-50V
C642	87-010-401-080		CAP, ELECT 1-50V
C643	87-010-196-080		CHIP CAPACITOR,0.1-25
C644	87-010-401-080		CAP, ELECT 1-50V
C671	87-010-322-080		C-CAP,S 100P-50 CH
C672	87-010-322-080		C-CAP,S 100P-50 CH
C675	87-016-669-080		C-CAP,S 0.1-25 K B
C673	87-010-197-080		CAP, CHIP 0.01 DM
C679	87-010-196-080		CHIP CAPACITOR,0.1-25
C680	87-010-197-080		CAP, CHIP 0.01 DM
C682	87-010-196-080		CHIP CAPACITOR,0.1-25
C771	87-010-263-080		CAP, ELECT 100-10V
C772	87-010-197-080		CAP, CHIP 0.01 DM
C773	87-010-184-080		CHIP CAPACITOR 3300P(K)
C774	87-010-184-080		CHIP CAPACITOR 3300P(K)
C779	87-010-426-080		C-CAP,S 0.012-25 K B
C780	87-010-426-080		C-CAP,S 0.012-25 K B
C782	87-010-197-080		CAP, CHIP 0.01 DM

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C783	87-010-197-080		CAP, CHIP 0.01 DM
C784	87-010-197-080		CAP, CHIP 0.01 DM
C785	87-010-197-080		CAP, CHIP 0.01 DM
C786	87-010-197-080		CAP, CHIP 0.01 DM
C788	87-010-149-080		C-CAP,S 5P-50 CH
C789	87-A10-592-080		C-CAP,S 0.015-50 J B
C790	87-A10-592-080		C-CAP,S 0.015-50 J B
C791	87-010-196-080		CHIP CAPACITOR,0.1-25
C792	87-010-197-080		CAP, CHIP 0.01 DM
C793	87-010-404-080		CAP, ELECT 4.7-50V
C795	87-010-197-080		CAP, CHIP 0.01 DM
C796	87-010-197-080		CAP, CHIP 0.01 DM
C797	87-010-405-080		CAP, ELECT 10-50V
C798	87-010-197-080		CAP, CHIP 0.01 DM
C799	87-010-407-080		CAP, ELECT 33-50V
C800	87-012-369-080		C-CAP,S 0.047-50F
C801	87-010-403-080		CAP, ELECT 3.3-50V
C802	87-012-369-080		C-CAP,S 0.047-50F
C803	87-010-198-080		CAP, CHIP 0.022
C804	87-010-263-080		CAP, ELECT 100-10V
C807	87-010-400-080		CAP, ELECT 0.47-50V
C808	87-010-401-080		CAP, ELECT 1-50V
C809	87-010-401-080		CAP, ELECT 1-50V
C810	87-010-196-080		CHIP CAPACITOR,0.1-25
C811	87-010-403-080		CAP, ELECT 3.3-50V
C812	87-010-403-080		CAP, ELECT 3.3-50V
C814	87-010-197-080		CAP, CHIP 0.01 DM
C815	87-010-400-080		CAP, ELECT 0.47-50V
C816	87-010-400-080		CAP, ELECT 0.47-50V
C819	87-010-179-080		CAP,CHIP S B1200P
C820	87-010-179-080		CAP,CHIP S B1200P
C821	87-010-405-080		CAP, ELECT 10-50V
C823	87-010-177-080		C-CAP,S 820P-50 SL
C824	87-010-404-080		CAP, ELECT 4.7-50V
C825	87-010-596-080		CAP, S 0.047-16
C842	87-010-197-080		CAP, CHIP 0.01 DM
C843	87-010-197-080		CAP, CHIP 0.01 DM
C844	87-010-197-080		CAP, CHIP 0.01 DM
C845	87-010-197-080		CAP, CHIP 0.01 DM
C846	87-010-197-080		CAP, CHIP 0.01 DM
C847	87-010-197-080		CAP, CHIP 0.01 DM
C848	87-010-197-080		CAP, CHIP 0.01 DM
C849	87-010-197-080		CAP, CHIP 0.01 DM
C850	87-010-260-080		CAP, ELECT 47-25V
C851	87-010-197-080		CAP, CHIP 0.01 DM
C852	87-010-197-080		CAP, CHIP 0.01 DM
C853	87-010-197-080		CAP, CHIP 0.01 DM
C858	87-010-196-080		CHIP CAPACITOR,0.1-25
C859	87-010-196-080		CHIP CAPACITOR,0.1-25
C860	87-010-197-080		CAP, CHIP 0.01 DM
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C961	87-010-152-080		C-CAP,S 8P-50 CH
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C971	87-010-381-080		CAP, ELECT 330-16V
C972	87-010-404-080		CAP, ELECT 4.7-50V
C973	87-010-197-080		CAP, CHIP 0.01 DM
C974	87-010-197-080		CAP, CHIP 0.01 DM
C979	87-010-322-080		C-CAP,S 100P-50 CH
C981	87-010-260-080		CAP, ELECT 47-25V
C982	87-010-196-080		CHIP CAPACITOR,0.1-25
C983	87-010-197-080		CAP, CHIP 0.01 DM
C984	87-010-197-080		CAP, CHIP 0.01 DM
C987	87-010-197-080		CAP, CHIP 0.01 DM
C991	87-010-312-080		C-CAP,S 15P-50 CH
C992	87-010-312-080		C-CAP,S 15P-50 CH
C993	87-010-178-080		CHIP CAP 1000P
C995	87-010-178-080		CHIP CAP 1000P
C997	87-010-196-080		CHIP CAPACITOR,0.1-25
C998	87-010-260-080		CAP, ELECT 47-25V
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-261-010		FILTER, SFE10.7MA5-A
CF832	87-008-261-010		FILTER, SFE10.7MA5-A
CN1	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN91	87-A60-109-010		CONN,2P V S2M-2W
CN101	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN301	87-A60-620-010		CONN,3P V 2MM JMT
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN601	87-099-719-010		CONN,30P TYK-B(X)
CN602	87-099-194-010		CONN,6P 6216V
CNA1	8A-NF6-646-010		CONN ASSY,9P TID-A(460)
CNA2	8A-NF6-640-010		CONN ASSY,3P (VM) ANF-6H
CON301	87-NF6-615-010		CONN ASSY,3P PB
CON351	87-NF6-616-010		CONN ASSY,8P RPB
FC602	88-906-621-110		FF-CABLE,6P 1.25 620MM
FFE831	A8-8ZA-190-030		8ZA-1 FEUNM
J102	87-A60-238-010		TERMINAL,SP 4P (MSC)
J103	87-A60-929-010		JACK,DIA6.3 BLK ST W/S TAI
J431	87-A61-069-010		JACK,PIN 6P R/W,O/B MSC
J601	87-A60-885-010		JACK,PIN 6P R/W MSC
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
L101	87-A50-610-010		COIL,1UH K(MDEC)
L102	87-A50-610-010		COIL,1UH K(MDEC)
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85K BIAS
L801	87-A50-608-010		COIL,FM DETN(TOK)
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)
L811	87-005-847-080		COIL,2.2UH(CECS)
L821	87-A50-209-010		COIL,1POLE MPX(MIT)
L822	87-A50-209-010		COIL,1POLE MPX(MIT)
L832	87-005-847-080		COIL,2.2UH(CECS)
L951	8A-NF8-667-010		COIL,AM PACK 4(TOK)
R161	87-A00-441-050		RES,270-1/2W J RP
R162	87-A00-441-050		RES,270-1/2W J RP
R163	87-A00-441-050		RES,270-1/2W J RP
R164	87-A00-441-050		RES,270-1/2W J RP
R790	87-010-197-080		CAP, CHIP 0.01 DM
R991	87-010-322-080		C-CAP,S 100P-50 CH
R993	87-010-322-080		C-CAP,S 100P-50 CH
R995	87-010-322-080		C-CAP,S 100P-50 CH
SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA
SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-30

FRONT C.B

C101	87-010-197-080		CAP, CHIP 0.01 DM
C102	87-010-322-080		C-CAP,S 100P-50 CH
C103	87-010-312-080		C-CAP,S 15P-50 CH
C104	87-012-157-080		C-CAP,S 330P-50 CH
C105	87-010-415-040		CAP,E 10-50 5L
C106	87-010-493-040		CAP,E 0.47-50 GAS
C107	87-A10-189-040		CAP,E 220-10
C108	87-A10-189-040		CAP,E 220-10
C109	87-010-196-080		CHIP CAPACITOR,0.1-25
C110	87-010-178-080		CHIP CAP 1000P
C112	87-012-368-080		C-CAP,S 0.1-50 F
C113	87-010-596-080		C-CAP,S 0.047-16 K R
C114	87-010-196-080		CHIP CAPACITOR,0.1-25
C115	87-010-196-080		CHIP CAPACITOR,0.1-25
C116	87-010-196-080		CHIP CAPACITOR,0.1-25
C118	87-012-145-080		CAP, CHIP S 270P CH
C180	87-010-178-080		CHIP CAP 1000P
C181	87-010-178-080		CHIP CAP 1000P
C202	87-012-156-080		C-CAP,S 220P-50 CH
C203	87-010-322-080		C-CAP,S 100P-50 CH
C204	87-012-157-080		C-CAP,S 330P-50 CH
C205	87-012-156-080		C-CAP,S 220P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C214	87-010-322-080		C-CAP,S 100P-50 CH
C215	87-010-322-080		C-CAP,S 100P-50 CH
C216	87-010-177-080		C-CAP,S 820P-50 SL
C221	87-010-421-040		CAP,E 4.7-50 5L
C222	87-010-421-040		CAP,E 4.7-50 5L
C223	87-010-408-040		CAP,E 47-50 SME
C224	87-012-369-080		C-CAP,S 0.047-50F
C312	87-010-498-040		CAP,E 10-16 GAS
C314	87-010-196-080		CHIP CAPACITOR,0.1-25
C315	87-010-196-080		CHIP CAPACITOR,0.1-25
C316	87-010-196-080		CHIP CAPACITOR,0.1-25
C321	87-012-393-080		C-CAP,S 0.22-16 R K
C382	87-010-320-080		CHIP CAP 68P
C383	87-010-196-080		CHIP CAPACITOR,0.1-25
C384	87-010-196-080		CHIP CAPACITOR,0.1-25
C385	87-010-196-080		CHIP CAPACITOR,0.1-25
C386	87-010-196-080		CHIP CAPACITOR,0.1-25
C387	87-010-196-080		CHIP CAPACITOR,0.1-25
C392	87-010-320-080		CHIP CAP 68P
C402	87-010-196-080		CHIP CAPACITOR,0.1-25
C403	87-010-322-080		C-CAP,S 100P-50 CH
C404	87-010-322-080		C-CAP,S 100P-50 CH
C405	87-010-322-080		C-CAP,S 100P-50 CH
C406	87-010-322-080		C-CAP,S 100P-50 CH
C407	87-010-322-080		C-CAP,S 100P-50 CH
C408	87-010-322-080		C-CAP,S 100P-50 CH
C461	87-010-196-080		CHIP CAPACITOR,0.1-25
C462	87-010-196-080		CHIP CAPACITOR,0.1-25
C463	87-010-196-080		CHIP CAPACITOR,0.1-25
C464	87-010-196-080		CHIP CAPACITOR,0.1-25
C465	87-010-196-080		CHIP CAPACITOR,0.1-25
C652	87-010-183-080		C-CAP,S 2700P-50 B
C653	87-010-213-080		C-CAP,S 0.015-50 B
C701	87-010-406-040		CAP,E 22-50 SME
C802	87-012-154-080		C-CAP,S 150P-50 CH
C804	87-010-187-080		CAP CHIP S5600P
C805	87-010-196-080		CHIP CAPACITOR,0.1-25
C806	87-010-401-040		CAP,E 1-50 SME
C807	87-010-196-080		CHIP CAPACITOR,0.1-25
C808	87-010-196-080		CHIP CAPACITOR,0.1-25
C809	87-012-155-080		C-CAP 180P-50CH
C810	87-010-263-040		CAP,E 100-10
C811	87-010-545-040		CAP,E 0.22-50 SME
C812	87-010-405-040		CAP,E 10-50
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN104	87-099-017-010		CONN, 15P 6216 V
CN301	87-099-195-010		CONN,7P 6216 V
CN604	87-099-210-010		CONN,5P 6216 H
CN901	87-A60-161-010		CONN,13P H FE
FB801	87-008-372-080		FILTER, EMI BL OIRNI
FC104	88-915-111-110		FF-CABLE,15P 1.25
FC301	88-907-421-110		FF-CABLE,7P 1.25 420MM
FC901	88-913-521-110		FF-CABLE,13P 1.25 520MM
FL201	8A-NF6-601-010		FL,BJ750GNK 13G-35S ANF-6
L101	87-A50-333-010		COIL,OSC 9.43MHZ
L801	87-A50-093-010		COIL,CLOCK 5.76MHZ
LED401	87-017-756-040		LED,SLR-342DCT31 ORN
LED402	87-017-756-040		LED,SLR-342DCT31 ORN
LED403	87-017-756-040		LED,SLR-342DCT31 ORN
LED404	87-017-756-040		LED,SLR-342DCT31 ORN
LED405	87-017-756-040		LED,SLR-342DCT31 ORN
LED406	87-A40-496-040		LED,SLR-342MCT31 GRN
LED407	87-A40-496-040		LED,SLR-342MCT31 GRN
LED408	87-A40-496-040		LED,SLR-342MCT31 GRN
LED409	87-A40-496-040		LED,SLR-342MCT31 GRN
LED410	87-A40-496-040		LED,SLR-342MCT31 GRN
LED416	87-A40-809-080		LED,LTL-307KK PGRN
LED417	87-A40-809-080		LED,LTL-307KK PGRN
LED418	87-A40-809-080		LED,LTL-307KK PGRN
LED419	87-A40-809-080		LED,LTL-307KK PGRN
LED420	87-A40-809-080		LED,LTL-307KK PGRN
LED421	87-A40-809-080		LED,LTL-307KK PGRN
LED425	87-A40-496-040		LED,SLR-342PCT31 GRN
LED426	87-A40-496-040		LED,SLR-342PCT31 GRN
LED431	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
LED432	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
LED433	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
LED440	87-A91-665-010		LED,SELU1E10 CXM-SLF55 BLUE
LED441	87-A91-665-010		LED,SELU1E10 CXM-SLF55 BLUE
LED499	87-A40-317-080		LED,SLR-342VCT31 RED
S101	87-A91-591-010		SW,RTRY RE0121PVB25FINA24
S102	87-A91-664-010		SW,RTRY RE0121PVB30F
S301	87-A91-024-180		SW,TACT KSH0611BT
S302	87-A91-024-180		SW,TACT KSH0611BT
S303	87-A91-024-180		SW,TACT KSH0611BT
S304	87-A91-024-180		SW,TACT KSH0611BT
S305	87-A91-024-180		SW,TACT KSH0611BT
S306	87-A91-024-180		SW,TACT KSH0611BT
S310	87-A91-024-180		SW,TACT KSH0611BT
S311	87-A91-024-180		SW,TACT KSH0611BT
S312	87-A91-024-180		SW,TACT KSH0611BT
S313	87-A91-024-180		SW,TACT KSH0611BT
S314	87-A91-024-180		SW,TACT KSH0611BT
S321	87-A91-024-180		SW,TACT KSH0611BT
S322	87-A91-024-180		SW,TACT KSH0611BT
S323	87-A91-024-180		SW,TACT KSH0611BT
S324	87-A91-024-180		SW,TACT KSH0611BT
S325	87-A91-024-180		SW,TACT KSH0611BT
S326	87-A91-024-180		SW,TACT KSH0611BT
S327	87-A91-024-180		SW,TACT KSH0611BT
S328	87-A91-024-180		SW,TACT KSH0611BT
S329	87-A91-024-180		SW,TACT KSH0611BT
S330	87-A91-024-180		SW,TACT KSH0611BT
S331	87-A91-024-180		SW,TACT KSH0611BT
S332	87-A91-024-180		SW,TACT KSH0611BT
S333	87-A91-024-180		SW,TACT KSH0611BT
S334	87-A91-024-180		SW,TACT KSH0611BT
S341	87-A91-024-180		SW,TACT KSH0611BT
S342	87-A91-024-180		SW,TACT KSH0611BT
S343	87-A91-024-180		SW,TACT KSH0611BT
S344	87-A91-024-180		SW,TACT KSH0611BT
S345	87-A91-024-180		SW,TACT KSH0611BT
S346	87-A91-024-180		SW,TACT KSH0611BT
S347	87-A91-024-180		SW,TACT KSH0611BT

CD KEY C.B

CN302	87-099-195-010		CONN,7P 6216 V
LED451	87-017-756-040		LED,SLR-342DCT31 ORN
LED452	87-017-756-040		LED,SLR-342DCT31 ORN
LED453	87-017-756-040		LED,SLR-342DCT31 ORN
LED454	87-A40-496-040		LED,SLR-342MCT31 GRN
LED455	87-A40-496-040		LED,SLR-342MCT31 GRN
LED456	87-A40-496-040		LED,SLR-342MCT31 GRN
S349	87-A91-024-180		SW,TACT KSH0611BT
S350	87-A91-024-180		SW,TACT KSH0611BT
S351	87-A91-024-180		SW,TACT KSH0611BT
S352	87-A91-024-180		SW,TACT KSH0611BT
S353	87-A91-024-180		SW,TACT KSH0611BT
S354	87-A91-024-180		SW,TACT KSH0611BT
S355	87-A91-024-180		SW,TACT KSH0611BT

MIC C.B

C601	87-010-186-080		CAP,CHIP 4700P
C602	87-010-405-040		CAP,E 10-50
C603	87-010-320-080		CHIP CAP 68P
C604	87-010-546-040		CAP,E 0.33-50
C605	87-012-368-080		C-CAP,S 0.1-50 ZF
C606	87-010-112-040		CAP,E 100-16

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C607	87-010-196-080		CHIP CAPACITOR,0.1-25
C608	87-010-178-080		CHIP CAP 1000P
C621	87-010-178-080		CHIP CAP 1000P
CN603	87-099-212-010		CONN,5P 6216 V
FB601	87-008-372-080		FILTER, EMI BL OIRNI
FC603	88-905-281-110		FF-CABLE, 5P 1.25 280MM
J601	87-A61-242-010		JACK,6.3 BLK MONO W/SW V KM
J602	87-A61-242-010		JACK,6.3 BLK MONO W/SW V KM

VM C.B

AMP 1F C.B

C101	87-010-181-080		C-CAP,S 1800P-50 K B
C102	87-010-181-080		C-CAP,S 1800P-50 K B
C103	87-010-545-080		CAP, ELECT 0.22-50V
C104	87-010-545-080		CAP, ELECT 0.22-50V
C107	87-010-405-080		CAP, ELECT 10-50V
C108	87-010-405-080		CAP, ELECT 10-50V
C111	87-010-179-080		C-CAP,S 1200P-50 K B
C112	87-010-179-080		C-CAP,S 1200P-50 K B
C113	87-010-405-080		CAP, ELECT 10-50V
C114	87-010-405-080		CAP, ELECT 10-50V
C115	87-010-866-080		CAP, ELECT 10-63 M VX
C116	87-010-866-080		CAP, ELECT 10-63 M VX
C119	87-010-197-080		CAP, CHIP 0.01 DM
C120	87-010-197-080		CAP, CHIP 0.01 DM
C133	87-010-190-080		C-CAP,S 0.01-50 ZF
C153	87-010-188-080		C-CAP,S 6800P-50 B
C201	87-A10-300-080		CAP,M 0.027-50 J
C202	87-A10-300-080		CAP,M 0.027-50 J
C203	87-A10-300-080		CAP,M 0.027-50 J
C204	87-A10-300-080		CAP,M 0.027-50 J
C205	87-010-180-080		C-CER 1500P
C206	87-010-180-080		C-CER 1500P
C207	87-010-401-080		CAP, ELECT 1-50V
C208	87-010-401-080		CAP, ELECT 1-50V
C209	87-010-187-080		CAP CHIP S5600P
C210	87-010-187-080		CAP CHIP S5600P
C211	87-010-403-080		CAP, ELECT 3.3-50V
C212	87-010-403-080		CAP, ELECT 3.3-50V
C215	87-010-179-080		C-CAP,S 1200P-50 K B
C216	87-010-179-080		C-CAP,S 1200P-50 K B
C217	87-010-405-080		CAP, ELECT 10-50V
C218	87-010-405-080		CAP, ELECT 10-50V
C221	87-010-405-080		CAP, ELECT 10-50V
C222	87-010-405-080		CAP, ELECT 10-50V
C223	87-010-197-080		CAP, CHIP 0.01 DM
C224	87-010-197-080		CAP, CHIP 0.01 DM
C251	87-012-368-080		C-CAP,S 0.1-50 F
C252	87-012-368-080		C-CAP,S 0.1-50 F
C253	87-010-196-080		CHIP CAPACITOR,0.1-25
C254	87-010-196-080		CHIP CAPACITOR,0.1-25
C401	87-010-260-080		CAP, ELECT 47-25V
CN101	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
CN102	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
CN105	87-099-198-010		CONN,10P V BLK 6216
CNA101	8A-NF6-645-010		CONN ASSY,5P TID-A(530)
CNA103	8A-NF8-655-010		CONN ASSY,7P TID-A(250)
FC105	88-910-151-110		FF-CABLE, 10P 1.25 150MM
J202	87-A61-158-010		JACK,PIN 2P R/W/BL H(SEPA)KM
L251	87-003-383-010		COIL,1UH-S
L252	87-003-383-010		COIL,1UH-S
R129	87-A00-262-080		RES,M/F 0.15-2W J
R130	87-A00-262-080		RES,M/F 0.15-2W J
R231	87-A00-258-080		RES,M/F 0.22-1W J
R232	87-A00-258-080		RES,M/F 0.22-1W J
WH101	87-A90-459-010		HLDR,WIRE 2.5-5P
WH102	87-A90-460-010		HLDR,WIRE 2.5-7P

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION

AMP PROLOGIC C.B

C101	87-010-181-080		CHIP CAP 1800P-50 K B
C102	87-010-181-080		CHIP CAP 1800P-50 K B
C103	87-010-400-080		CAP, ELECT 0.47-50V
C104	87-010-400-080		CAP, ELECT 0.47-50V
C107	87-010-405-080		CAP, ELECT 10-50V
C108	87-010-405-080		CAP, ELECT 10-50V
C111	87-010-179-080		C-CAP,S 1200P-50 K B
C112	87-010-179-080		C-CAP,S 1200P-50 K B
C113	87-010-405-080		CAP, ELECT 10-50V
C114	87-010-405-080		CAP, ELECT 10-50V
C115	87-010-405-080		CAP, ELECT 10-50V
C116	87-010-405-080		CAP, ELECT 10-50V
C121	87-010-197-080		C-CAP,S 0.01-25 K B
C122	87-010-197-080		C-CAP,S 0.01-25 K B
C151	87-012-368-080		C-CAP,S 0.1-50 F
C152	87-012-368-080		C-CAP,S 0.1-50 F
C153	87-012-368-080		C-CAP,S 0.1-50 F
C154	87-012-368-080		C-CAP,S 0.1-50 F
C155	87-010-190-080		S CHIP F 0.01
C156	87-010-190-080		S CHIP F 0.01
C160	87-010-190-080		S CHIP F 0.01
C161	87-010-188-080		CAP,CHIP 6800P
C201	87-010-181-080		CHIP CAP 1800P
C202	87-010-400-080		CAP,E 0.47-50
C203	87-010-322-080		C-CAP,S 100P-50 CH
C204	87-010-405-080		CAP,E 10-50
C205	87-010-260-080		CAP, ELECT 47-25V
C206	87-A10-946-080		C-CAP,S 220P-100 CH
C208	87-010-197-080		CAP, CHIP 0.01 DM
C209	87-010-260-080		CAP, ELECT 47-25V
C210	87-010-260-080		CAP, ELECT 47-25V
C211	87-010-178-080		C-CAP,S 1000P-50 K B
C212	87-010-178-080		C-CAP,S 1000P-50 K B
C251	87-012-368-080		C-CAP,S 0.1-50 F
C252	87-012-368-080		C-CAP,S 0.1-50 F
CN101	87-A61-109-010		CONN,7P V TID-A
CN102	87-099-198-010		CONN,10P V BLK 6216
J101	87-A61-159-010		JACK,PIN 4P R/W/B/0 KM
L151	87-003-383-010		COIL,1UH-K
L152	87-003-383-010		COIL,1UH-K
L251	87-003-383-010		COIL,1UH-K
R131	87-A00-258-080		RES,M/F 0.22-1W J
R132	87-A00-258-080		RES,M/F 0.22-1W J
R218	87-A00-258-080		RES,M/F 0.22-1W J
TH201	87-A91-042-080		C-THMS,100K 55001

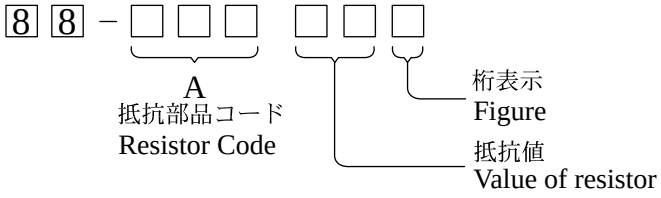
PT C.B

C1	87-010-387-080		CAP,E 470-25 SME
C4	87-A11-148-080		CAP,TC U 0.1-50 Z F
C5	87-A11-148-080		CAP,TC U 0.1-50 Z F
C6	87-010-917-000		CAP,E 3300-50 M SMG
C7	87-010-917-000		CAP,E 3300-50 M SMG
C8	87-A11-148-080		CAP,TC U 0.1-50 Z F
C9	87-A11-148-080		CAP,TC U 0.1-50 Z F
C10	87-A11-148-080		CAP,TC U 0.1-50 Z F
C11	87-A11-148-080		CAP,TC U 0.1-50 Z F
C12	87-016-520-000		CAP,E 3300-65 M SMG
C13	87-016-520-000		CAP,E 3300-65 M SMG
C16	87-010-403-080		CAP, ELECT 3.3-50V
CN1	87-A61-110-010		CONN,9P V TID-A
CN2	87-A61-108-010		CONN,5P V TID-A
⚠ PT2	8A-NF8-661-010		PT,SUB ANF-8 (U)
⚠ PT101	8A-NFT-621-010		PT,U EI96-60 ANF-T
⚠ RY2	87-A90-976-010		RELAY,AC12V SDT-S-112LMR
⚠ T1	87-A60-317-010		TERMINAL, 1P MSC
⚠ T2	87-A60-317-010		TERMINAL, 1P MSC

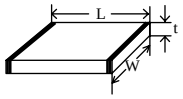
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
DECK C.B			
CON501	87-099-756-019		CONN,15P 9604S F
SFR1	87-024-581-010		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-410		SOL ASSY,27
SOL2	82-ZM1-618-410		SOL ASSY,27
SW1	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW2	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW3	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-036-110-010		SW,MICRO SPPB62
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM3-601-010		RBN-CORD,4P-75
HEAD-1 C.B			
HEAD-2 C.B			

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

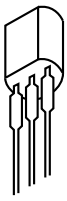
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード ：A Resistor Code：A
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION

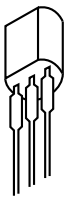


E C B

KTA1266GR
KTC3198GR
CD1585BC
CSA952K

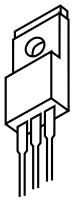
E C B

CC5551



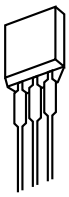
E C B

CSC4115BC



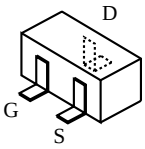
B C E

2SB1370
2SD1933
2SB1342

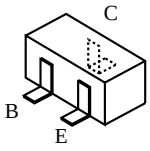


E C B

DTC114ES
2SA933S



2SK2158
2SJ461-T1



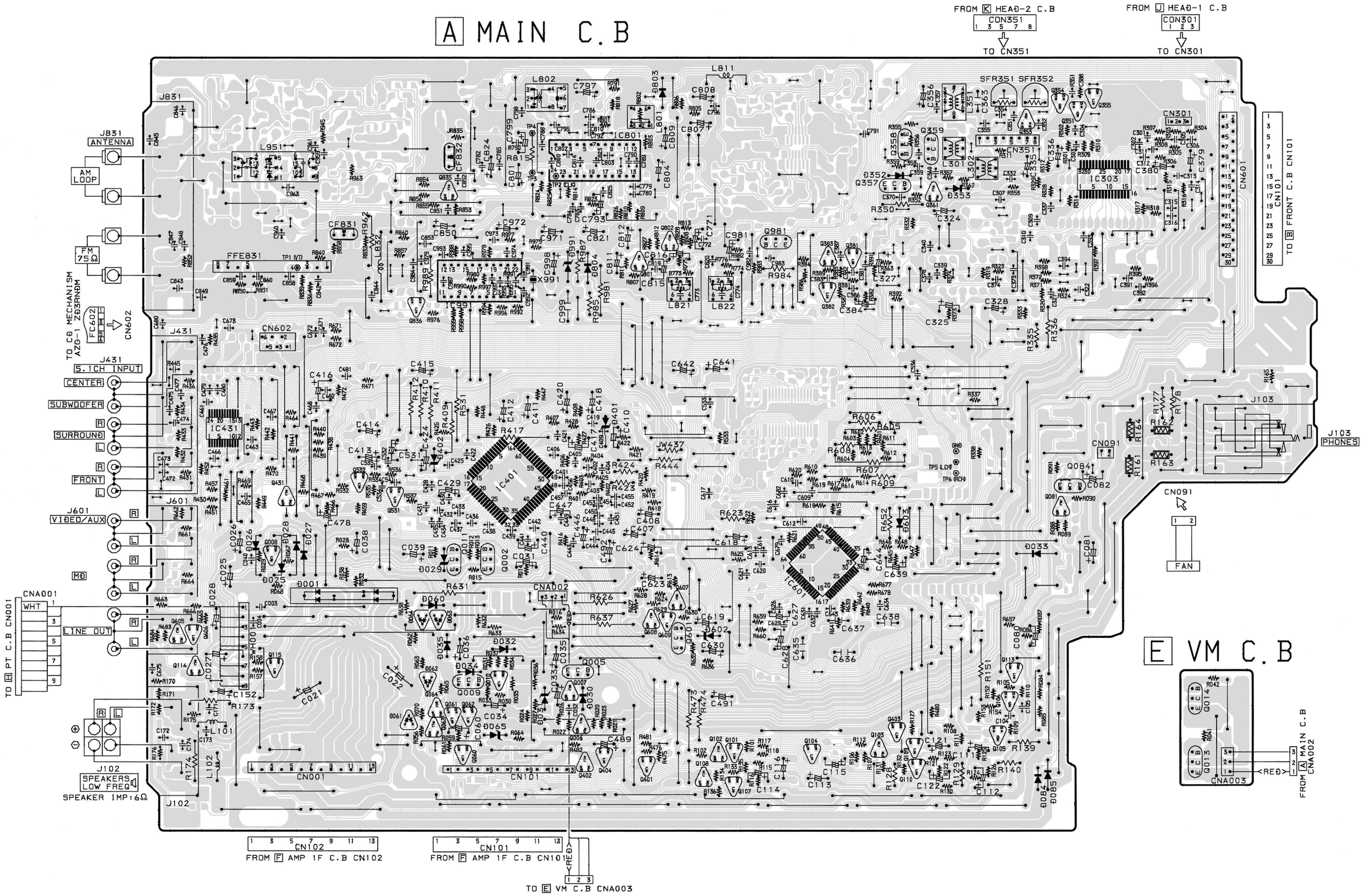
2SA1235F
2SC2714O
2SC3052F
CMBT5551
CMBT5401
RT1P141C

CSD1306E
KRA104S
KRC102S-RTK
KRA107S
RT1P441C

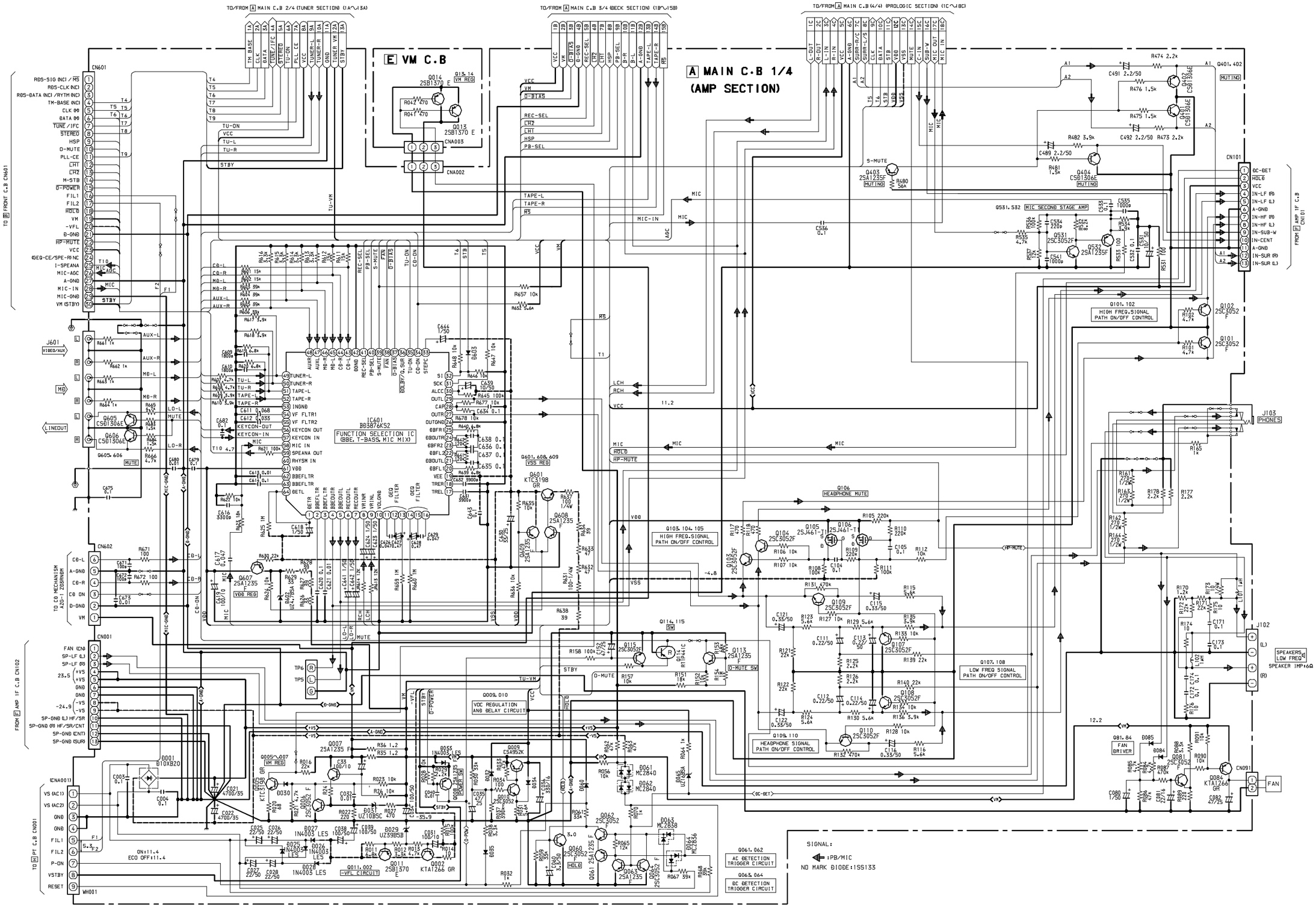
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

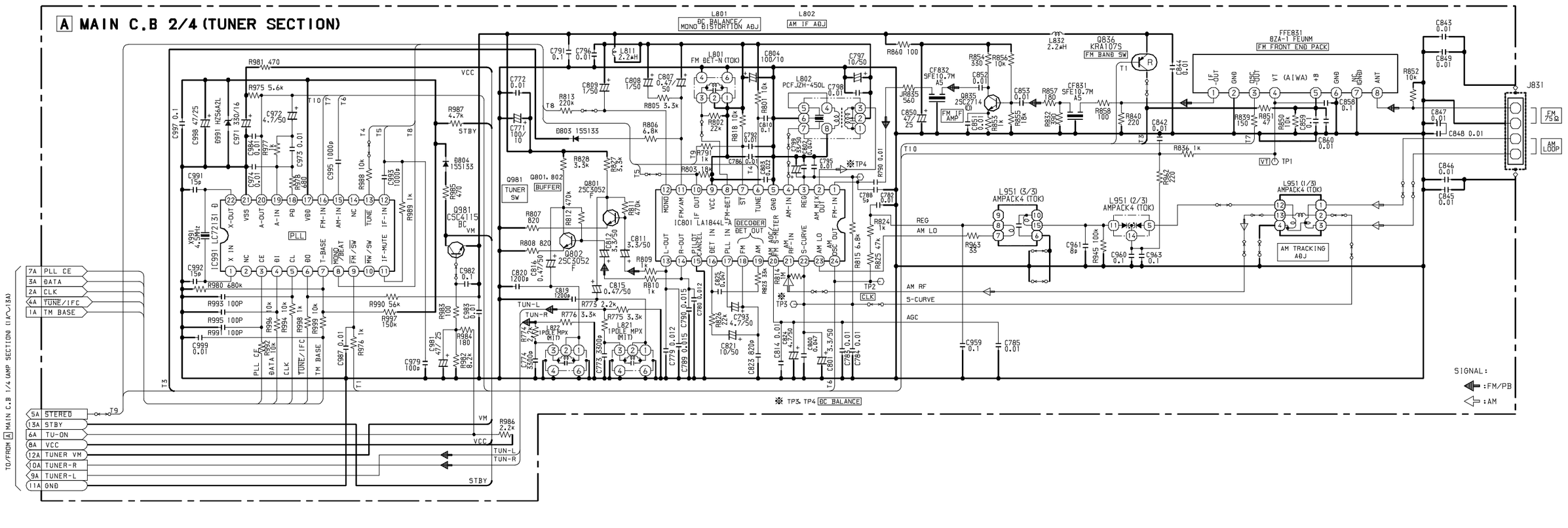
A MAIN C.B



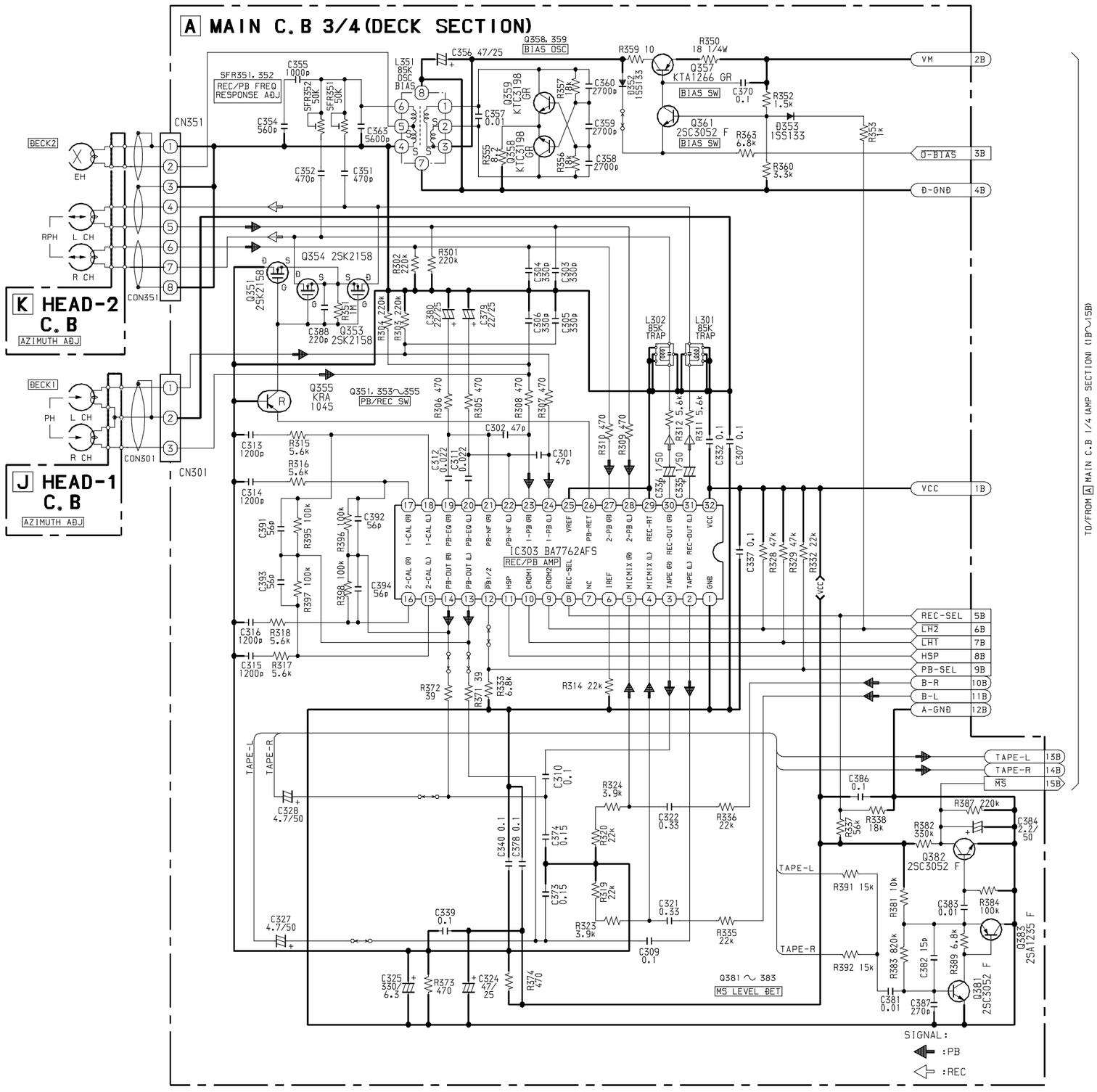
SCHEMATIC DIAGRAM – 1 (MAIN 1 / 4: AMP SECTION / VM)

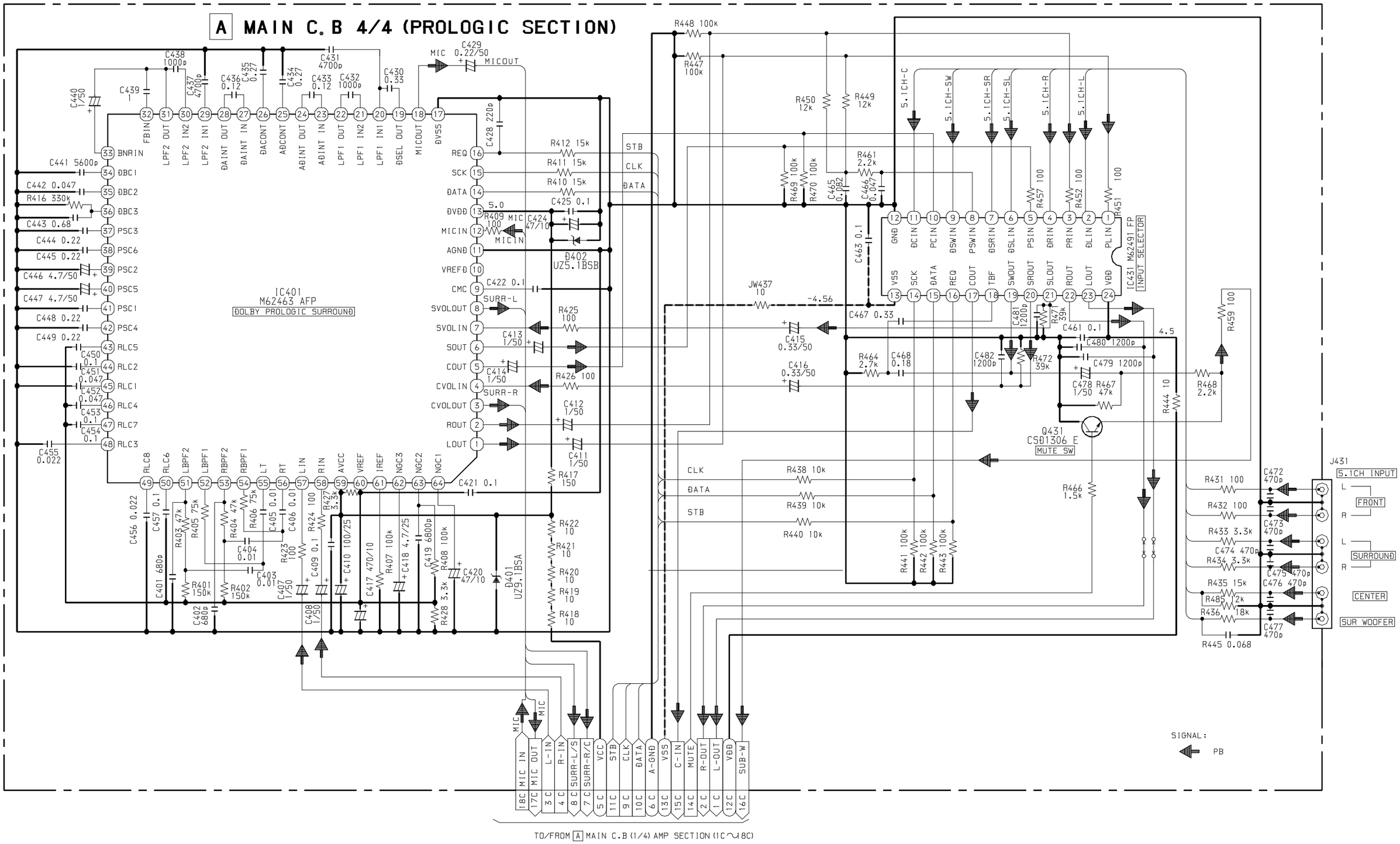


SCHEMATIC DIAGRAM – 2 (MAIN 2 / 4: TUNER SECTION)

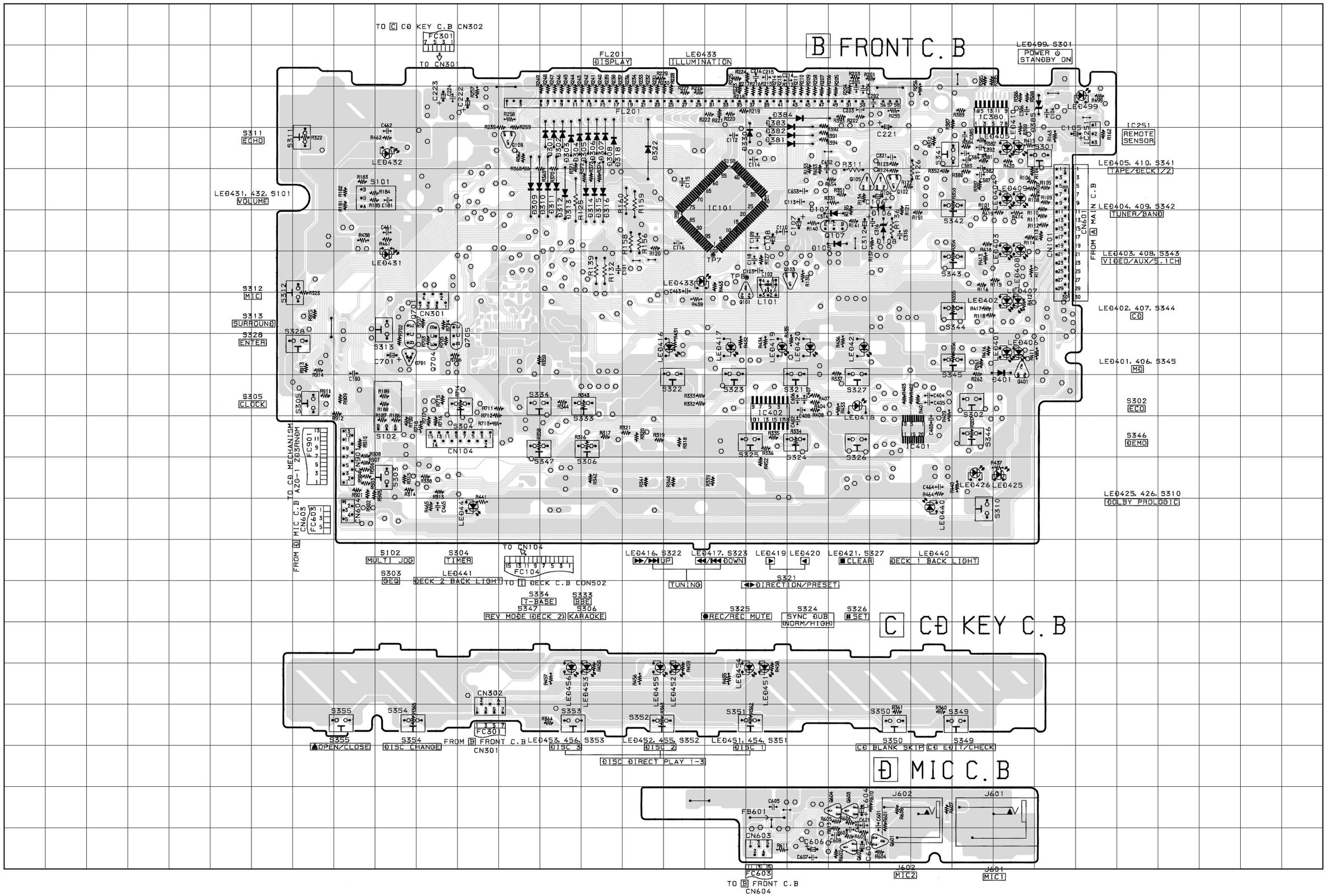


SCHEMATIC DIAGRAM – 3 (MAIN 3 / 4: DECK SECTION / HEAD – 1 / HEAD – 2)

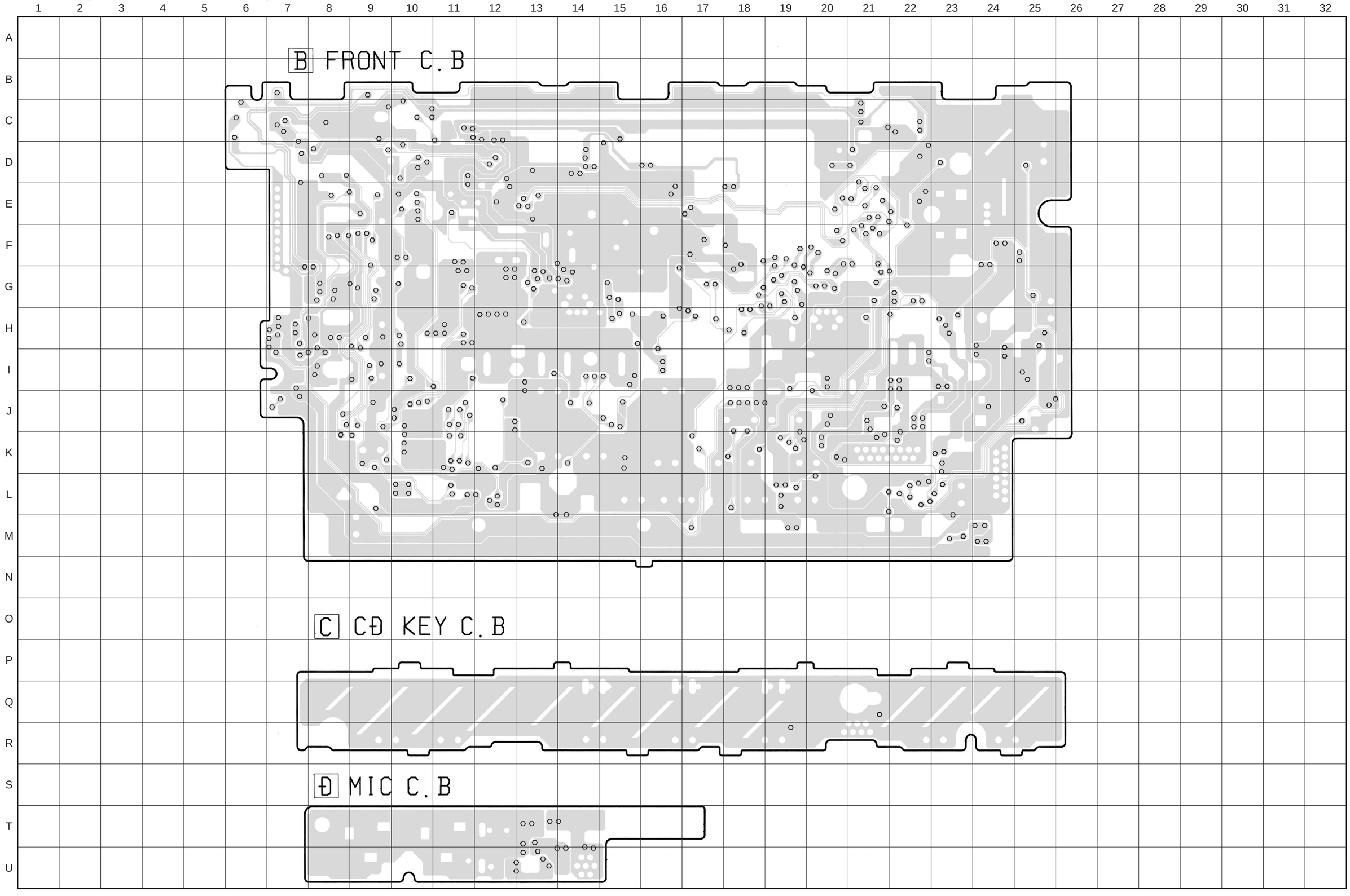



A MAIN C.B 4/4 (PROLOGIC SECTION)
IC401
M62463 AFP
ÐOLBY PROLOGIC SURROUNÐ
IC431 M62491 FP
INPUT SELECTOR
Q431
CSÐ1306 E
MUTE SW
Ð402
UZ5.1BSB
Ð401
UZ9.1BSA
J431
5.1CH INPUT
FRONT
SURROUNÐ
CENTER
SUR WOOFER
STB
CLK
ÐATA
SIGNAL:
PB
TO/FROM A MAIN C.B (1/4) AMP SECTION (1C~18C)

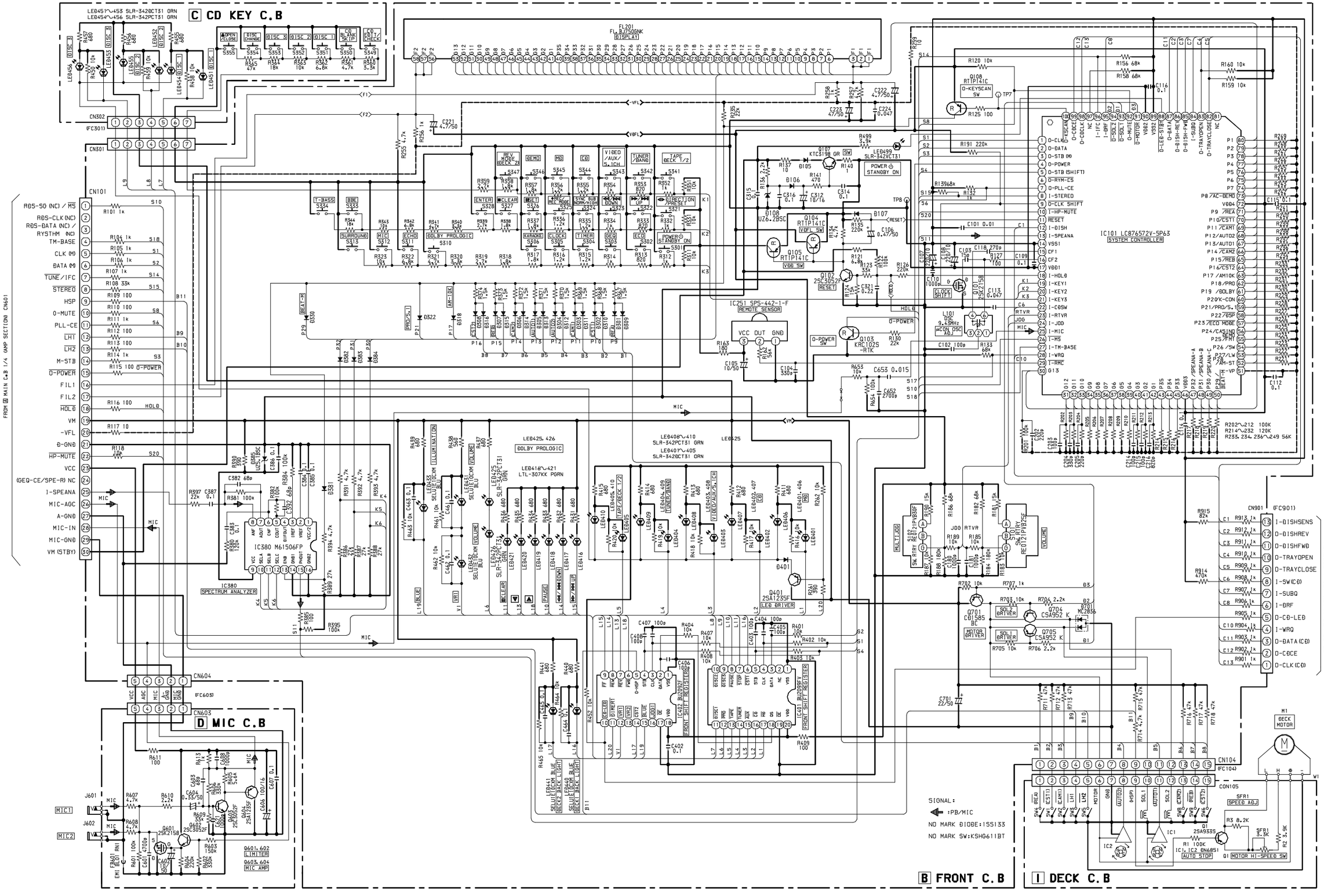
WIRING – 2 (FRONT / CD KEY / MIC) <1 / 2>

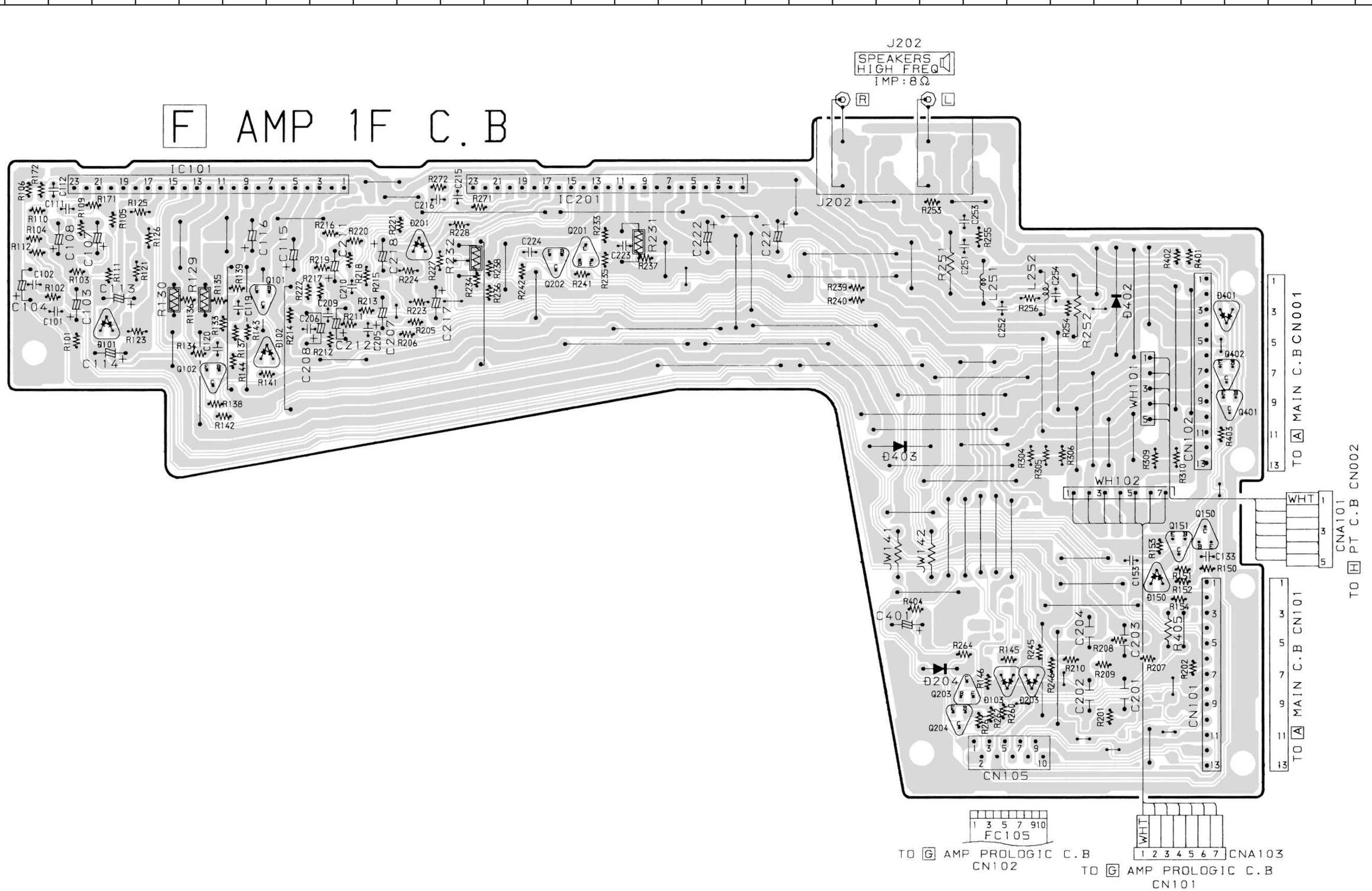


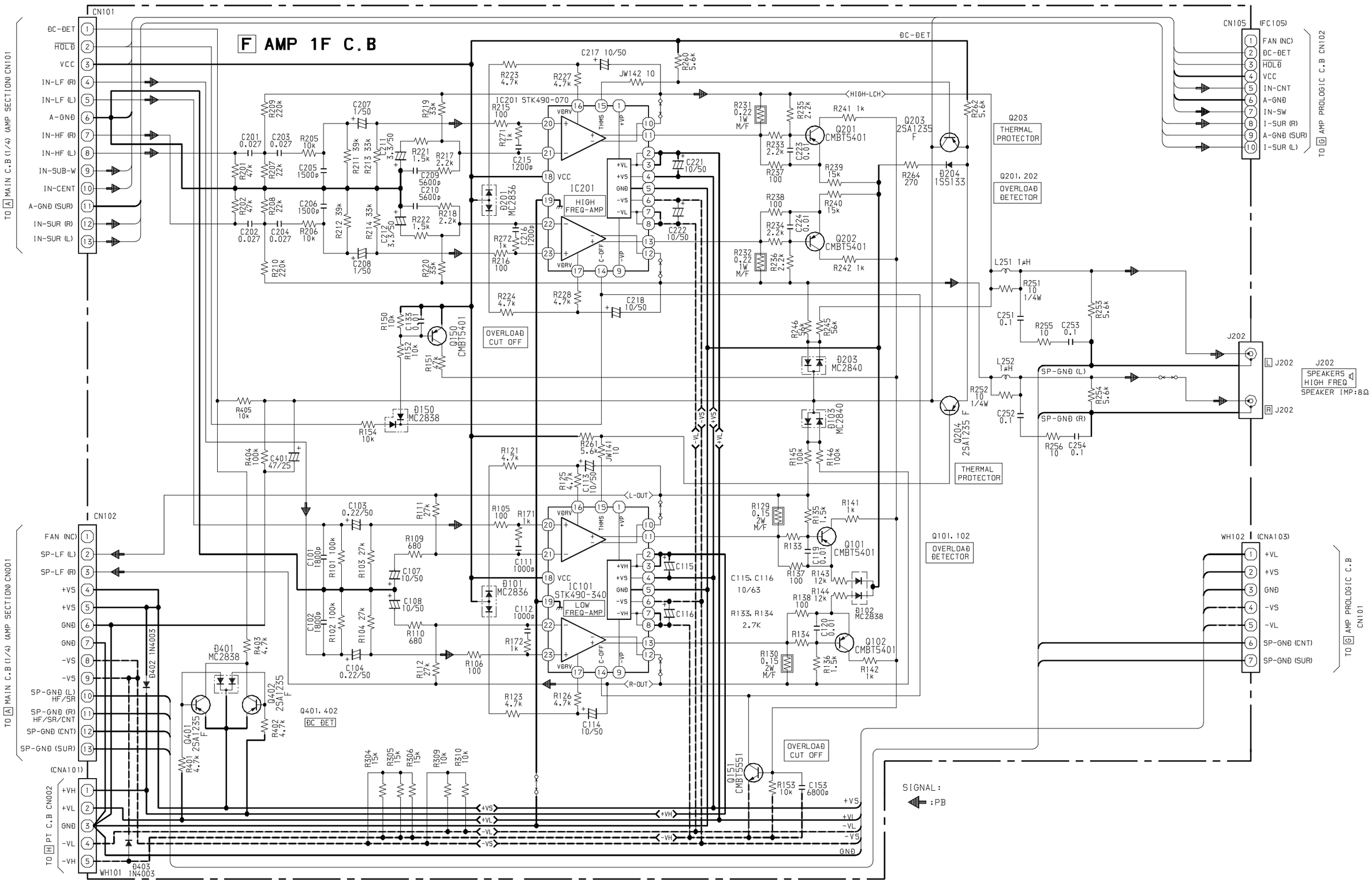
WIRING – 2 (FRONT / CD KEY / MIC) <2 / 2>

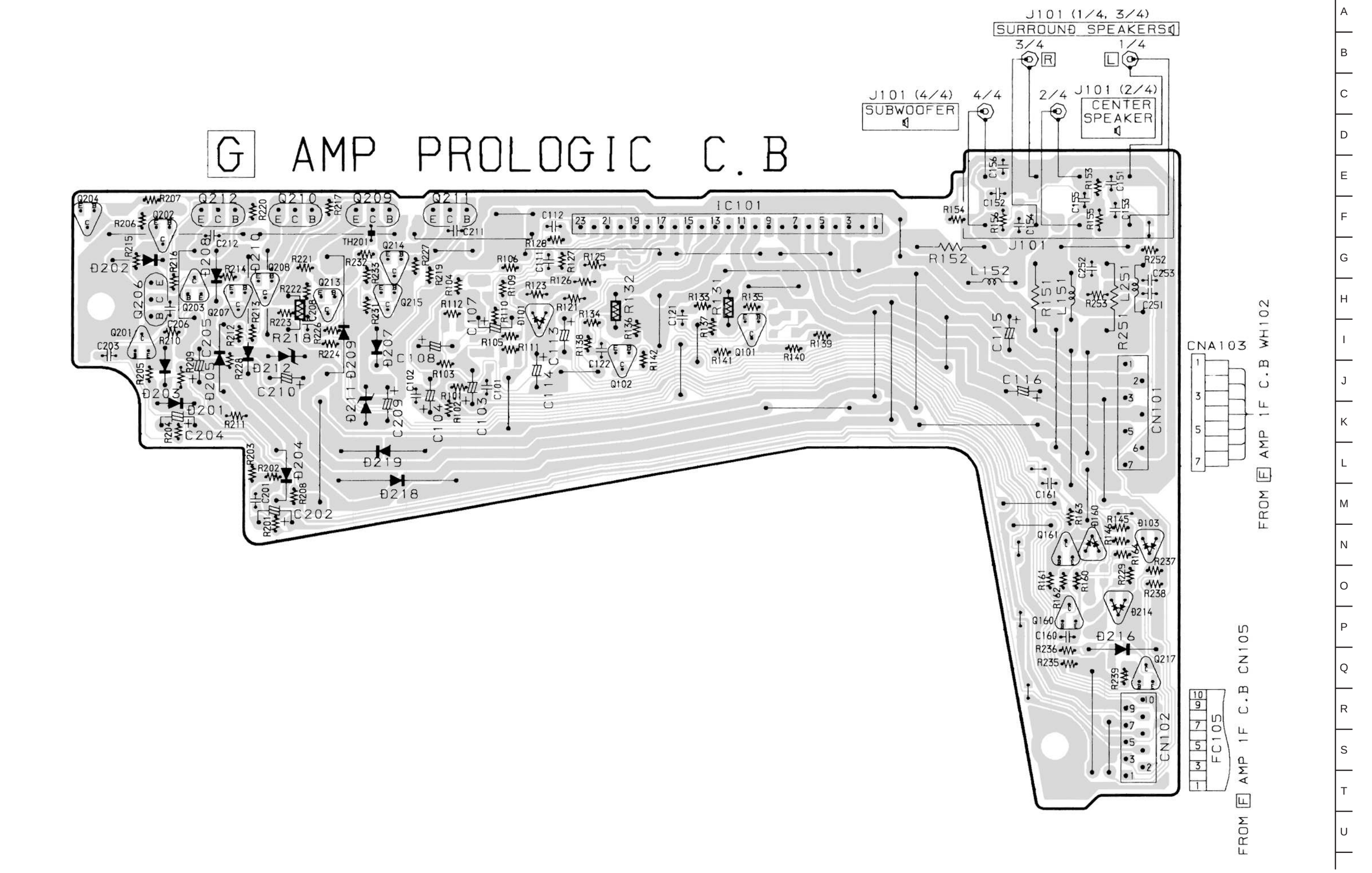


SCHEMATIC DIAGRAM – 5 (FRONT / CD KEY / MIC / DECK)

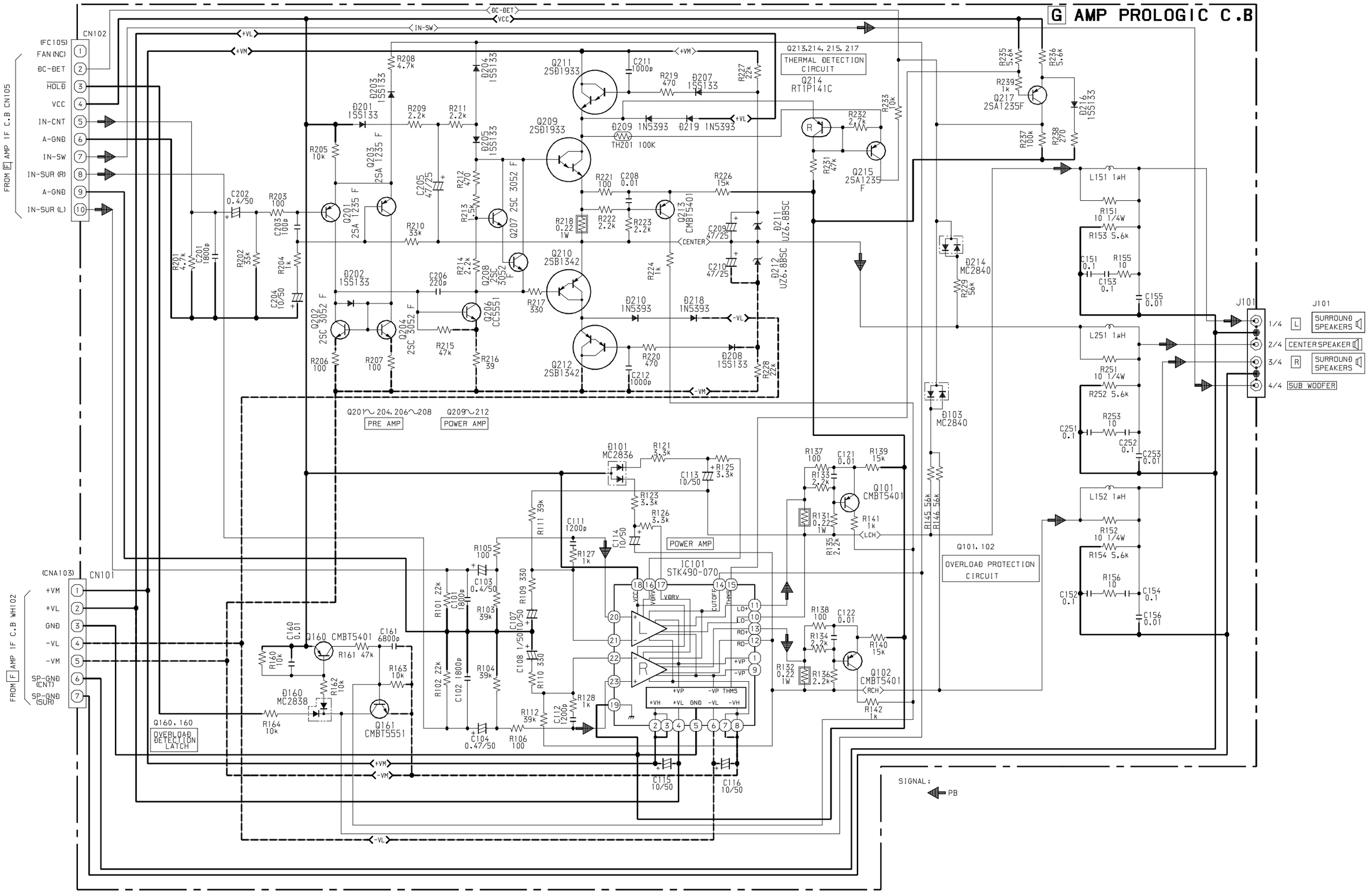



F AMP 1F C.B
J202
SPEAKERS
HIGH FREQ
IMP : 8Ω
R
L
IC101
IC201
WH101
WH102
CN102
CN101
CN105
CNA101
CNA103
WHT
FC105
TO A MAIN C.B CN001
TO H PT C.B CN002
TO A MAIN C.B CN101
TO G AMP PROLOGIC C.B CN102
TO G AMP PROLOGIC C.B CN101


F AMP 1F C.B
CN101
ÐC-ÐET
HOLÐ
VCC
IN-LF (R)
IN-LF (L)
A-GNÐ
IN-HF (R)
IN-HF (L)
IN-SUB-W
IN-CENT
A-GNÐ (SUR)
IN-SUR (R)
IN-SUR (L)
TO A MAIN C.B (1/4) (AMP SECTION) CN101
IC201 STK490-070
IC201
HIGH FREQ-AMP
VCC
VÐRV
THMS
+VP
-VP
C-OFF
+VL
+VS
GNÐ
-VS
-VL
OVERLOAÐ CUT OFF
Q150 CMBT5401
Ð150 MC2838
Ð201 MC2836
Ð203 MC2840
Ð204 1SS133
Q203 2SA1235 F
THERMAL PROTECTOR
Q201 CMBT5401
Q202 CMBT5401
Q201, 202 OVERLOAÐ ÐETECTOR
HIGH-LCH
ÐC-ÐET
CN105 (FC105)
FAN (NC)
ÐC-ÐET
HOLÐ
VCC
IN-CNT
A-GNÐ
IN-SW
I-SUR (R)
A-GNÐ (SUR)
I-SUR (L)
TO G AMP PROLOGIC C.B CN102
J202
L J202
R J202
SPEAKERS HIGH FREQ
SPEAKER IMP:8Ω
SP-GNÐ (L)
SP-GNÐ (R)
L-OUT
R-OUT
Q204 2SA1235 F
THERMAL PROTECTOR
Q101, 102 OVERLOAÐ ÐETECTOR
Q101 CMBT5401
Q102 CMBT5401
C115, C116 10/63
R133, R134 2.7K
Ð102 MC2838
WH102 (CNA103)
+VL
+VS
GNÐ
-VS
-VL
SP-GNÐ (CNT)
SP-GNÐ (SUR)
TO G AMP PROLOGIC C.B CN101
CN102
FAN (NC)
SP-LF (L)
SP-LF (R)
+VS
+VS
GNÐ
GNÐ
-VS
-VS
SP-GNÐ (L) HF/SR
SP-GNÐ (R) HF/SR/CNT
SP-GNÐ (CNT)
SP-GNÐ (SUR)
TO A MAIN C.B (1/4) (AMP SECTION) CN001
Ð401 MC2838
Ð402 1N4003
Ð403 1N4003
Q401 2SA1235 F
Q402 2SA1235 F
Q401, 402 ÐC ÐET
OVERLOAÐ CUT OFF
Q151 CMBT5551
(CNA101)
+VH
+VL
GNÐ
-VL
-VH
TO H PT C.B CN002
WH101
SIGNAL:
:PB


G AMP PROLOGIC C.B
J101 (1/4, 3/4)
SURROUND SPEAKERS
3/4
R
1/4
L
J101 (4/4)
SUBWOOFER
4/4
2/4
J101 (2/4)
CENTER SPEAKER
IC101
J101
CNA103
FROM F AMP 1F C.B WH102
FROM F AMP 1F C.B CN105
FC105
CN101
CN102
TH201
Q101
Q102
Q160
Q161
Q201
Q202
Q203
Q204
Q205
Q206
Q207
Q208
Q209
Q210
Q211
Q212
Q213
Q214
Q215
Q217
Đ101
Đ103
Đ201
Đ202
Đ203
Đ204
Đ205
Đ207
Đ208
Đ209
Đ210
Đ211
Đ212
Đ214
Đ216
Đ218
Đ219
L151
L152
L251

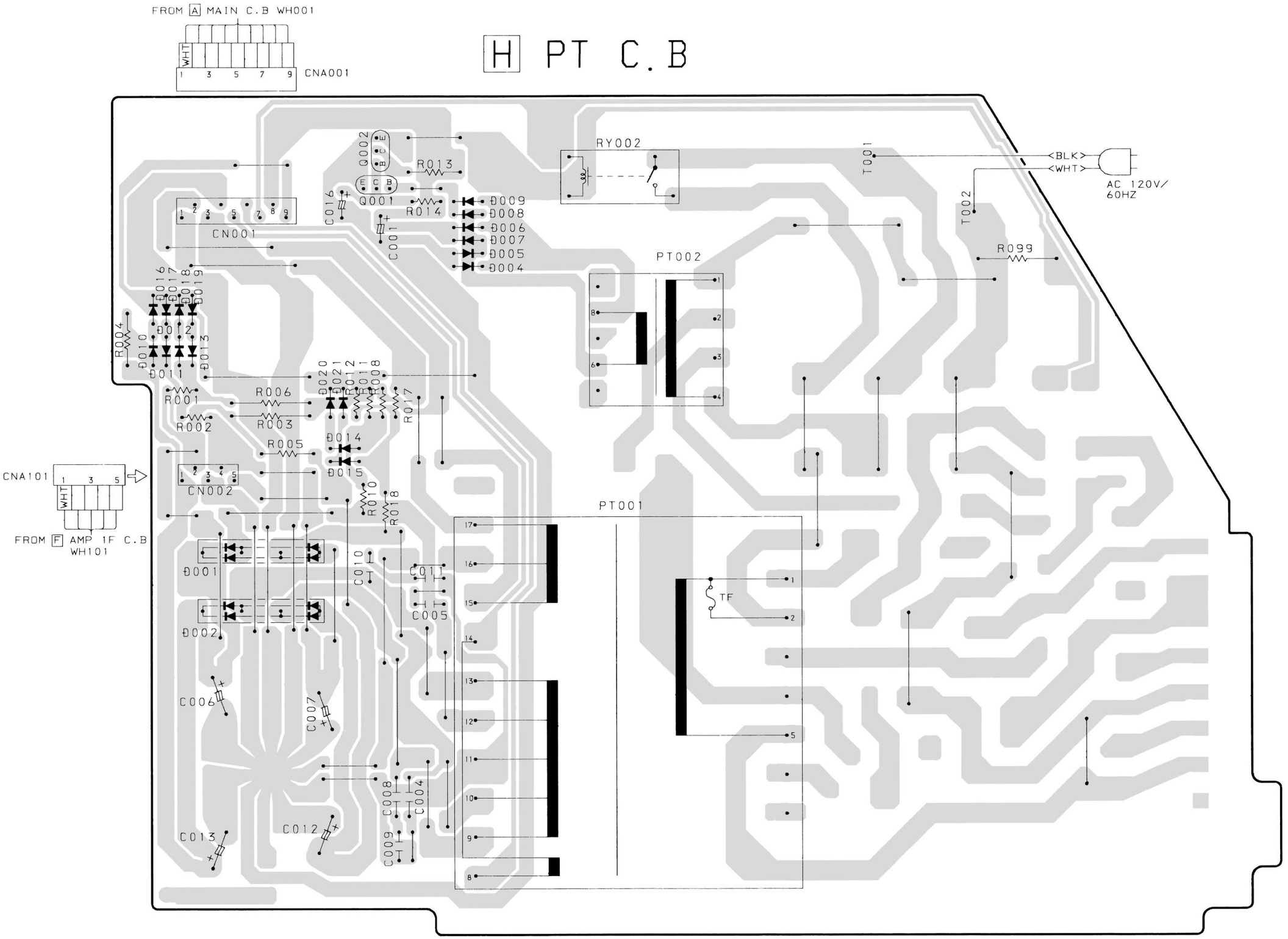
SCHEMATIC DIAGRAM – 7 (AMP PROLOGIC)

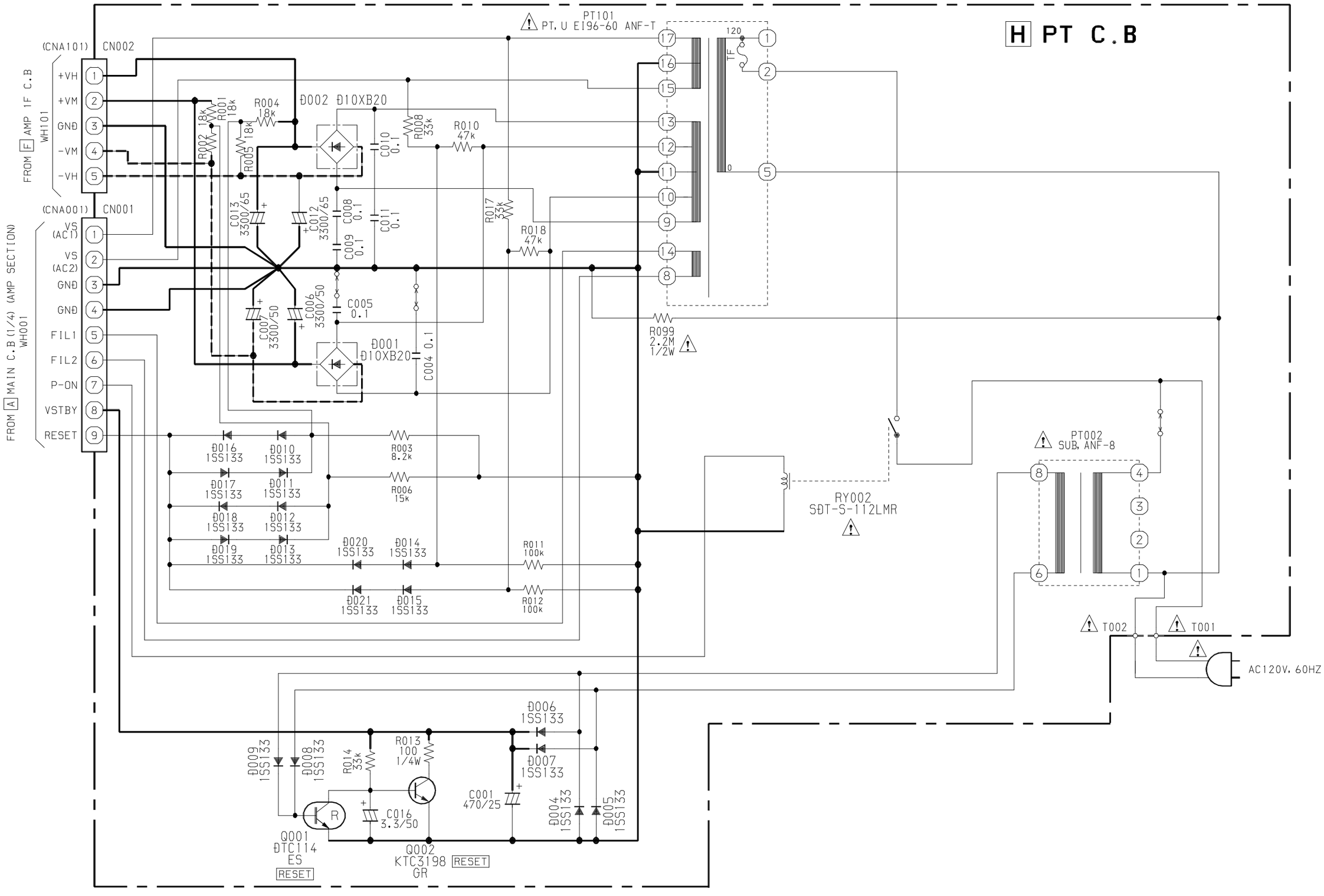


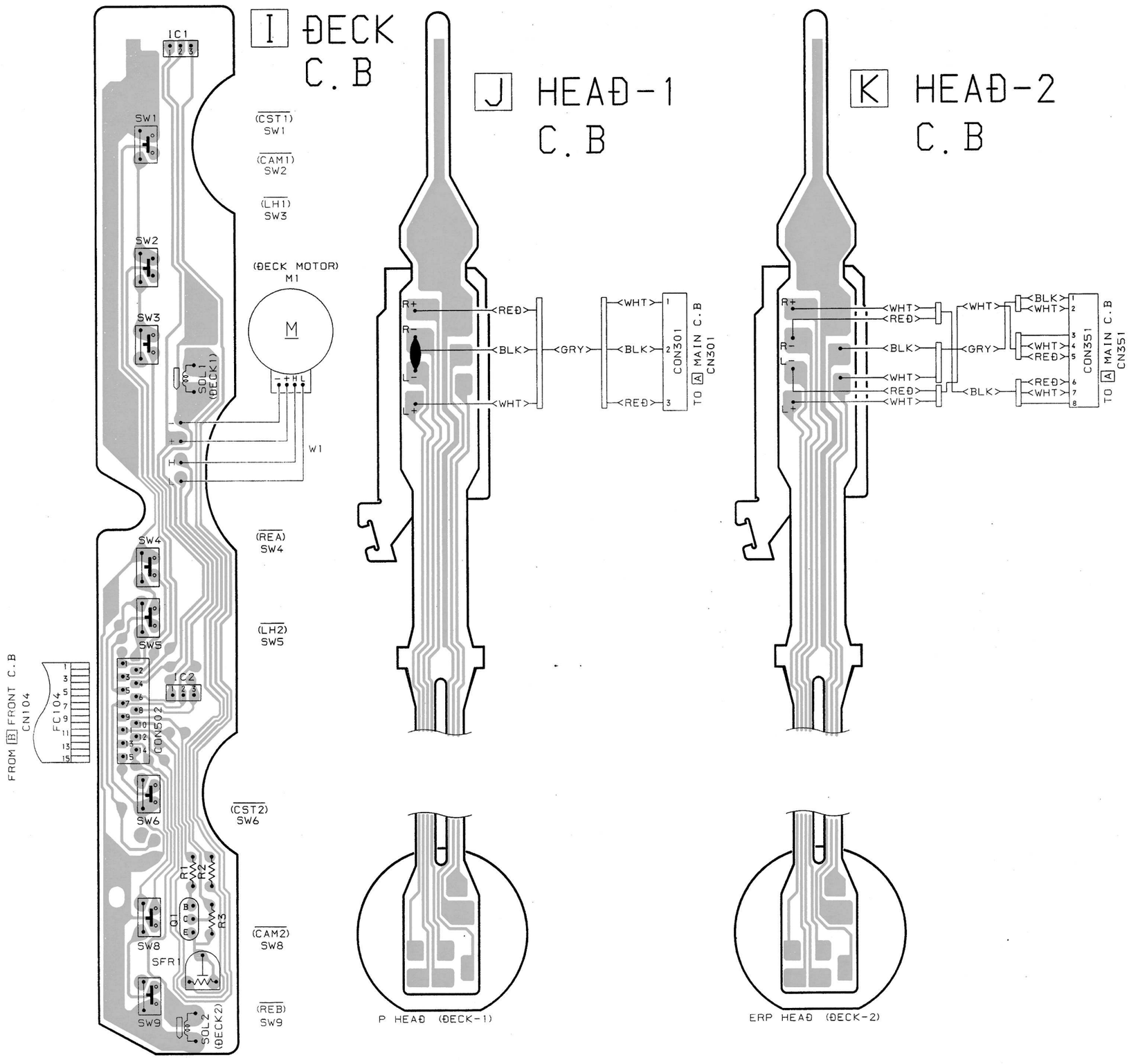
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

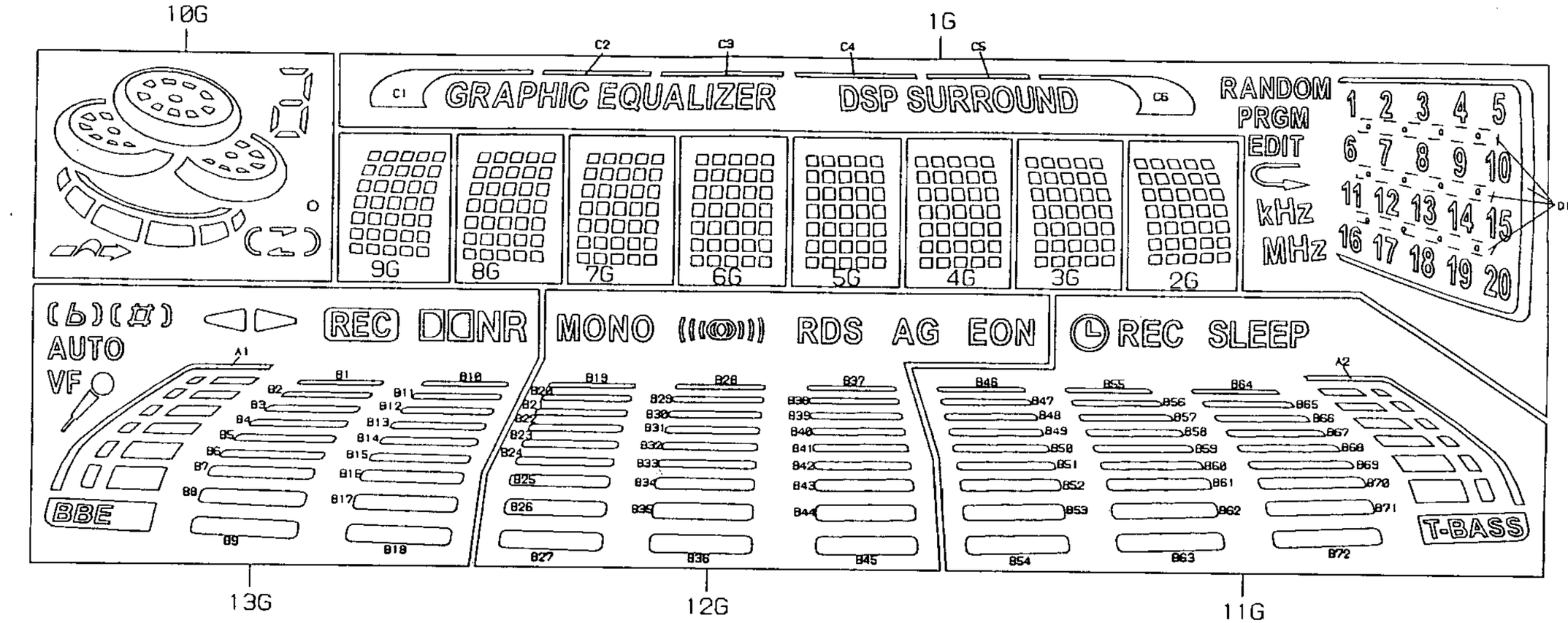
H PT C.B

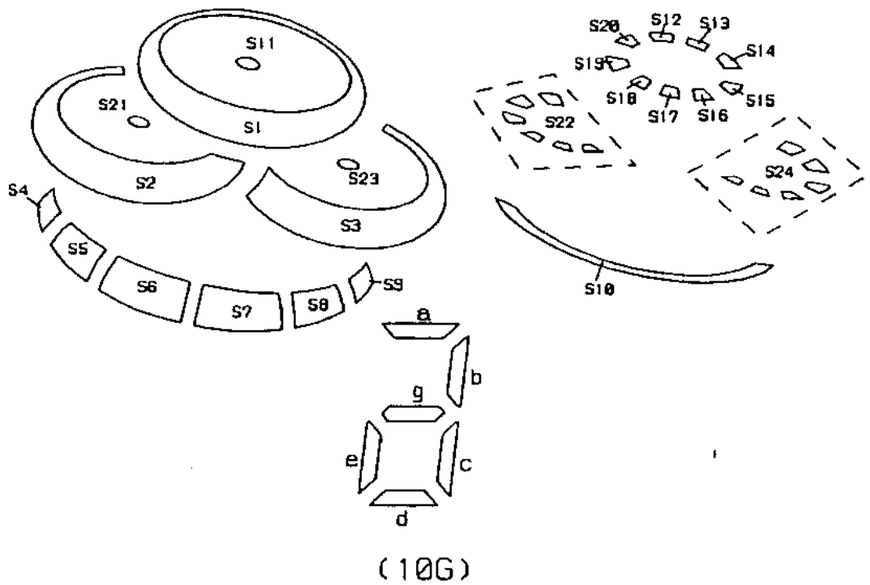



H PT C.B
PT101
PT, U EI96-60 ANF-T
(CNA101) CN002
FROM F AMP IF C.B
WH101
+VH
+VM
GNĐ
-VM
-VH
(CNA001) CN001
FROM A MAIN C.B(1/4) (AMP SECTION)
WH001
VS (AC1)
VS (AC2)
GNĐ
GNĐ
FIL1
FIL2
P-ON
VSTBY
RESET
R001 18k
R002 18k
R004 18k
R005 18k
Đ002 Đ10XB20
C010 0.1
R008 33k
R010 47k
C013 3300/65
C012 3300/65
C008 0.1
C009 0.1
C011 0.1
R017 33k
R018 47k
C006 3300/50
C007 3300/50
C005 0.1
Đ001 Đ10XB20
C004 0.1
R099 2.2M 1/2W
Đ016 1SS133
Đ010 1SS133
Đ017 1SS133
Đ011 1SS133
Đ018 1SS133
Đ012 1SS133
Đ019 1SS133
Đ013 1SS133
Đ020 1SS133
Đ014 1SS133
Đ021 1SS133
Đ015 1SS133
R003 8.2k
R006 15k
R011 100k
R012 100k
RY002
SĐT-S-112LMR
TF
120
0
PT002
SUB, ANF-8
T002
T001
AC120V, 60HZ
Đ009 1SS133
Đ008 1SS133
R014 33k
R013 100 1/4W
Đ006 1SS133
Đ007 1SS133
C001 470/25
Đ004 1SS133
Đ005 1SS133
C016 3.3/50
Q001 ĐTC114 ES RESET
Q002 KTC3198 GR RESET

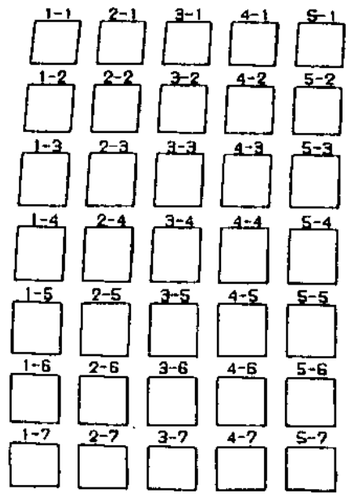

I DECK C.B
J HEAD-1 C.B
K HEAD-2 C.B
IC1
SW1
SW2
SW3
(CST1) SW1
(CAM1) SW2
(LH1) SW3
(DECK MOTOR) M1
M
SOL1 (DECK1)
W1
SW4
SW5
SW6
SW8
SW9
(REA) SW4
(LH2) SW5
(CST2) SW6
(CAM2) SW8
(REB) SW9
IC2
CON502
FC104
FROM B FRONT C.B CN104
R1
R2
R3
Q1
SFR1
SOL2 (DECK2)
R+
R-
L-
L+
RED
BLK
GRY
WHT
CON301
TO A MAIN C.B CN301
CON351
TO A MAIN C.B CN351
P HEAD (DECK-1)
ERP HEAD (DECK-2)

GRID ASSIGNMENT

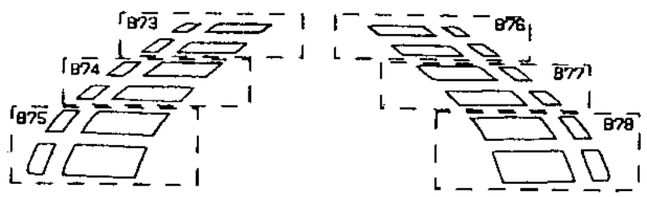




(10G)



(2G~9G)



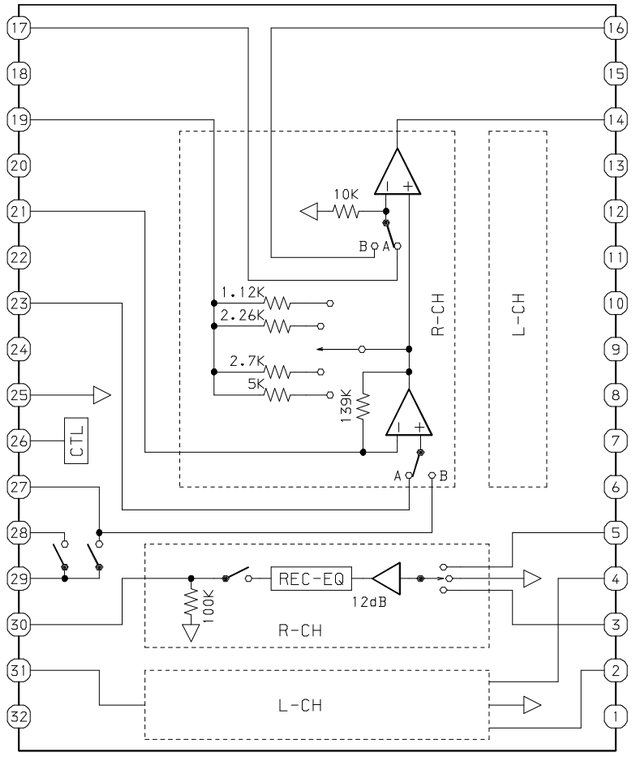
(13G) (11G)

ANODE CONNECTION

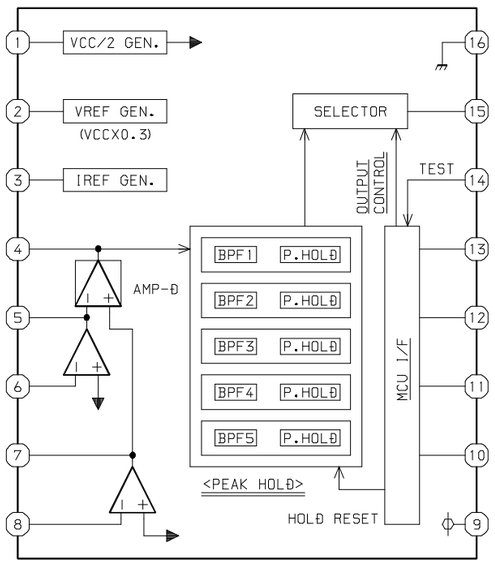
	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	♭ ♯	B27	B54	b	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	DSP SURROUND
P2	((♭))	B36	B63	c	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	GRAPHIC EQUALIZER
P3	((♯))	B45	B72	a,d,g	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	C6
P4	◁	B26	B53	e	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	C5
P5	▷	B35	B62	S1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	C4
P6	REC	B44	B71	S12	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	C3
P7	DX NR	B25	B52	S13	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	C2
P8	AUTO	B34	B61	S20	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	C1
P9	VF	B43	B70	S14	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	RANDOM
P10	A1	B24	B51	S11	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	PRGM
P11	BBE	B33	B60	S19	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	EDIT
P12	B75	B42	B69	S15	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	↵
P13	B74	B23	B50	S18	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	kHz
P14	B73	B32	B59	S16	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	MHz
P15	B9	B41	B68	S17	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	16
P16	B18	B22	B49	S3	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	11
P17	B8	B31	B58	S24	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	6
P18	B17	B40	B67	S23	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	1
P19	B7	B21	B48	S2	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	17
P20	B16	B30	B57	S22	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	12
P21	B6	B39	B66	S21	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	7
P22	B15	B20	B47	S10	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2
P23	B5	B29	B56	S9	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	18
P24	B14	B38	B65	S8	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	13
P25	B4	B19	B46	S7	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	8
P26	B13	B28	B55	S6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	3
P27	B3	B37	B64	S5	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	19
P28	B12	MONO	T-BASS	S4	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	14
P29	B2	((◉))	A2	◯	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	9
P30	B11	RDS	B78	⇝	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	4
P31	B1	AG	B77	☾	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	20
P32	B10	EON	B76	⇄	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	15
P33	-	-	SLEEP	☽	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	10
P34	-	-	REC	-	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	5
P35	-	-	◷	-	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	D1

IC BLOCK DIAGRAM

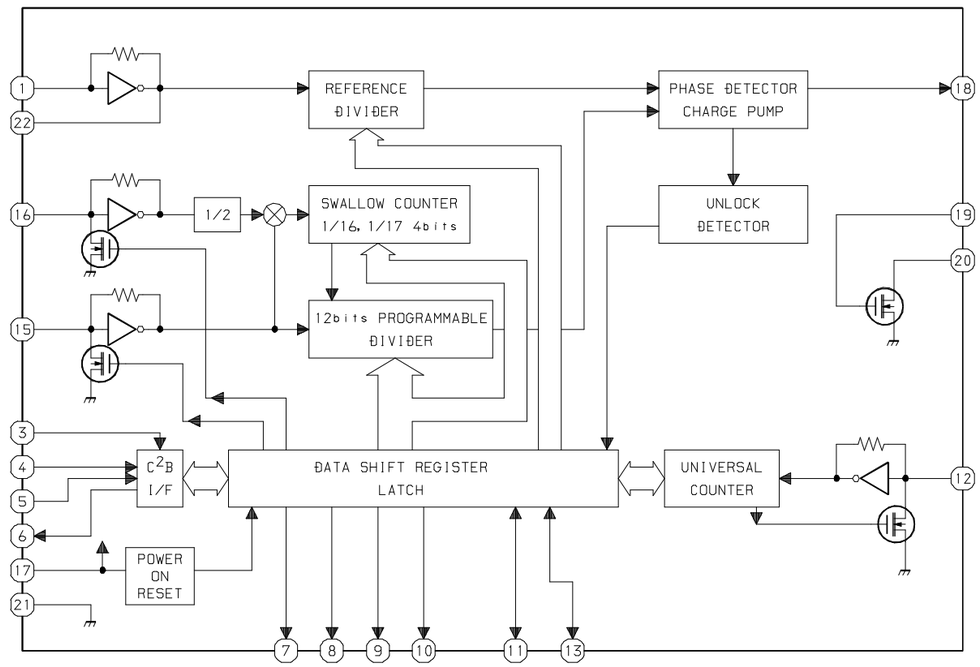
IC, BA7762AFS



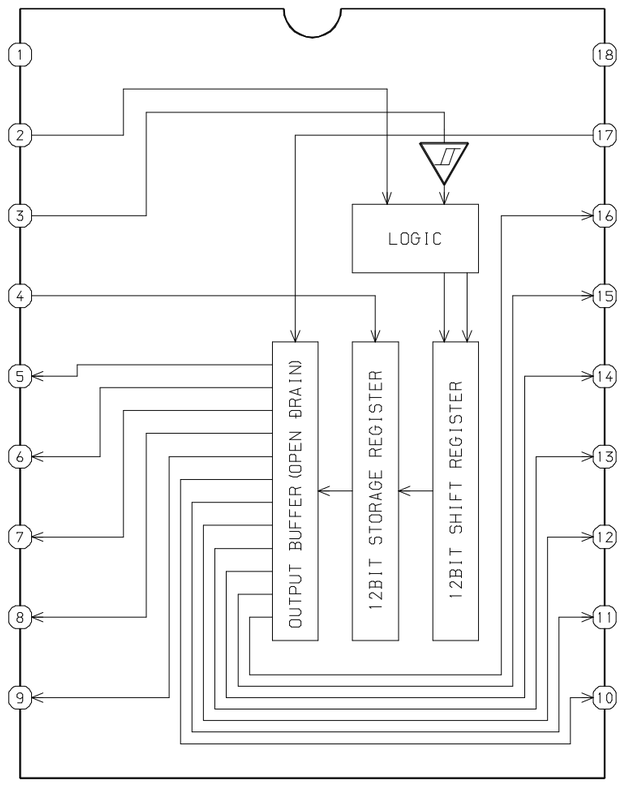
IC, M61506FP



IC, LC72131Ð



IC, BU2092F



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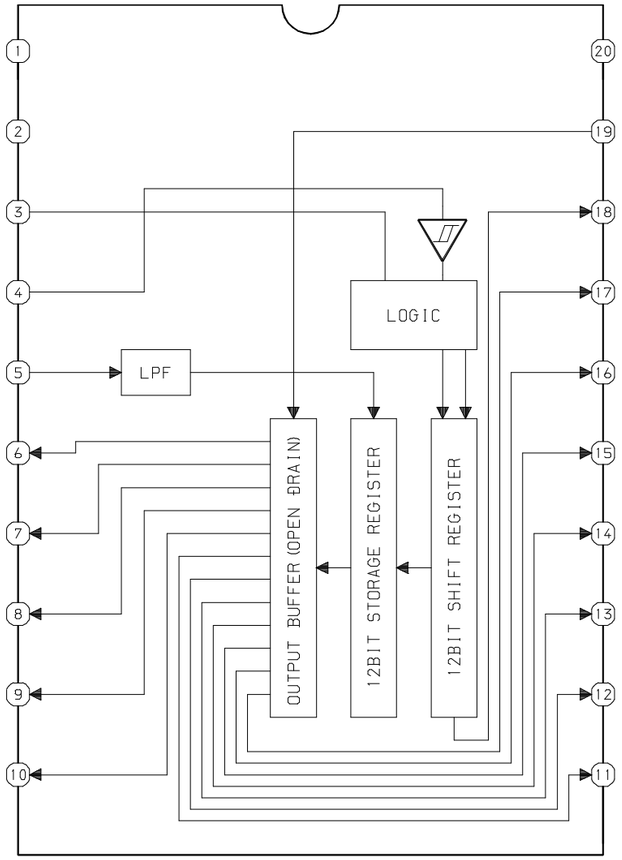
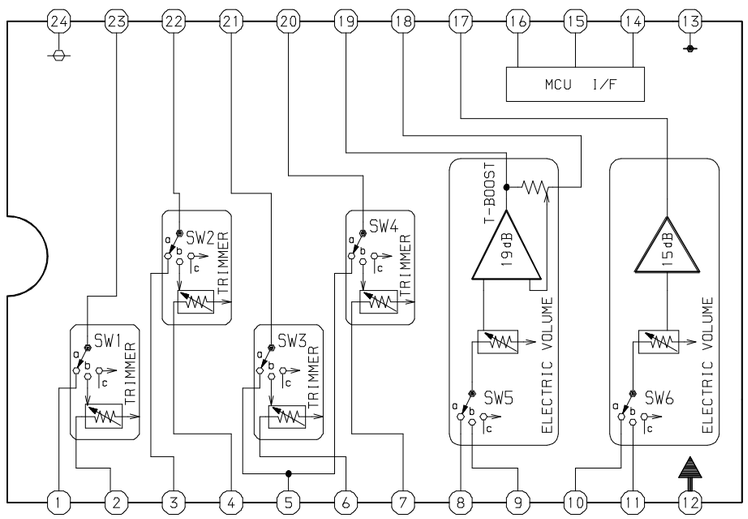
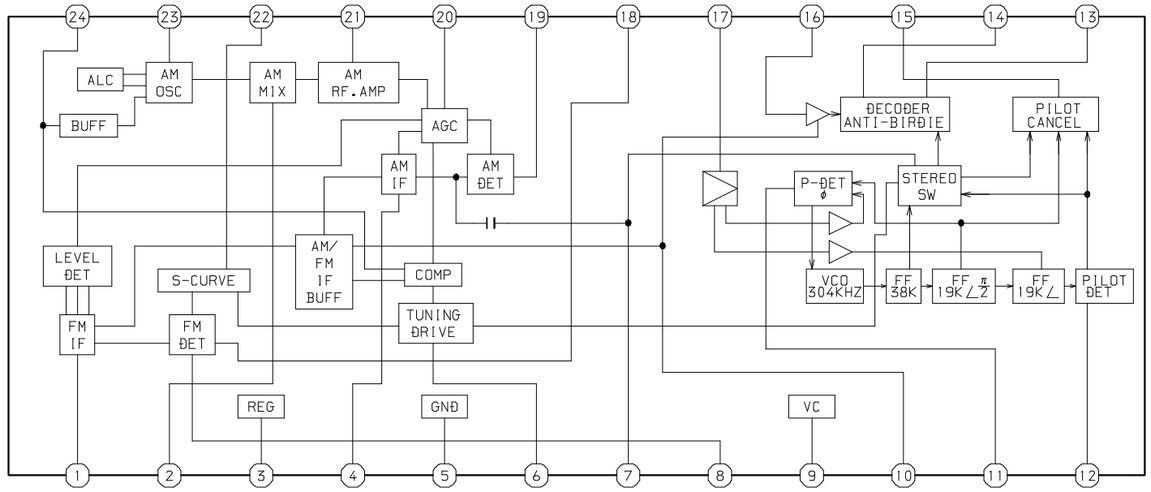


IC, M62491FP

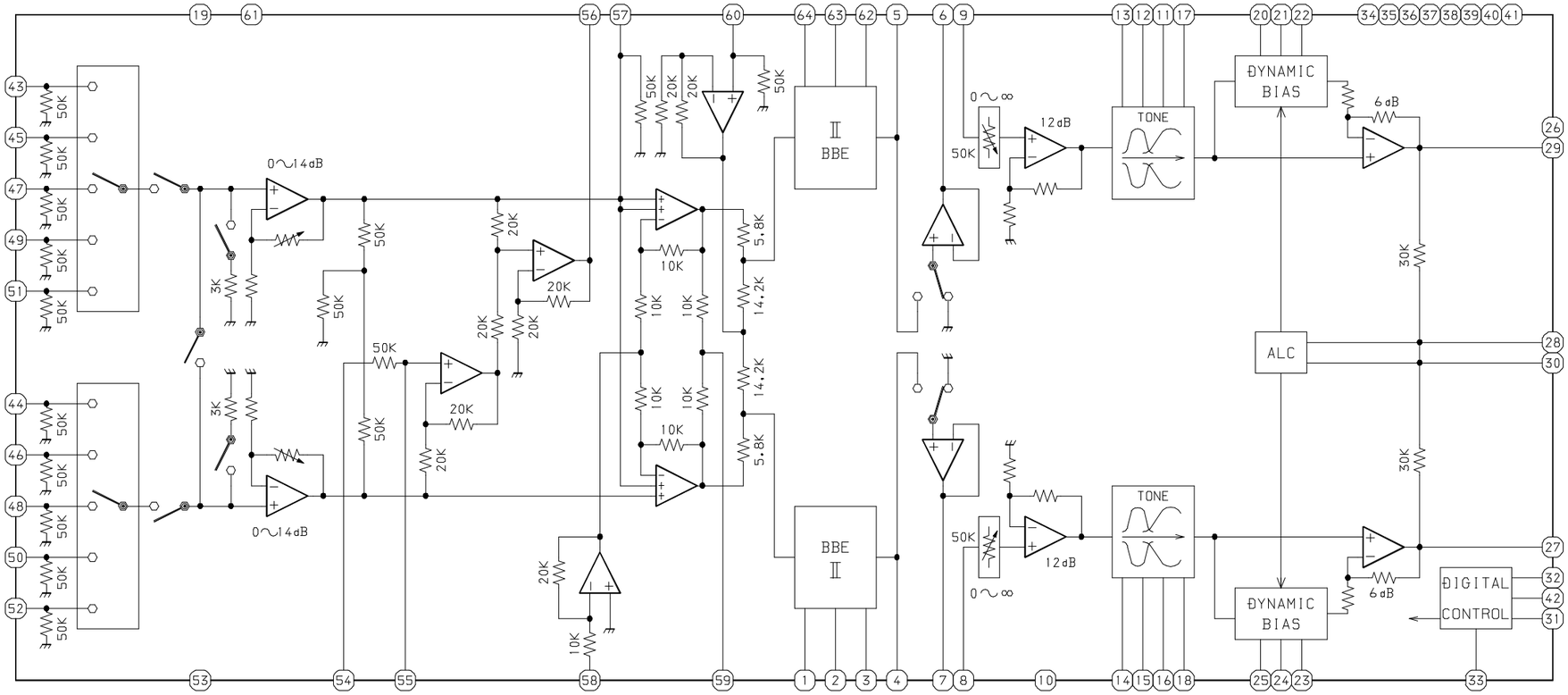


IC, LA1844L-A



IC, M62463AFP

IC, BD3876KS2

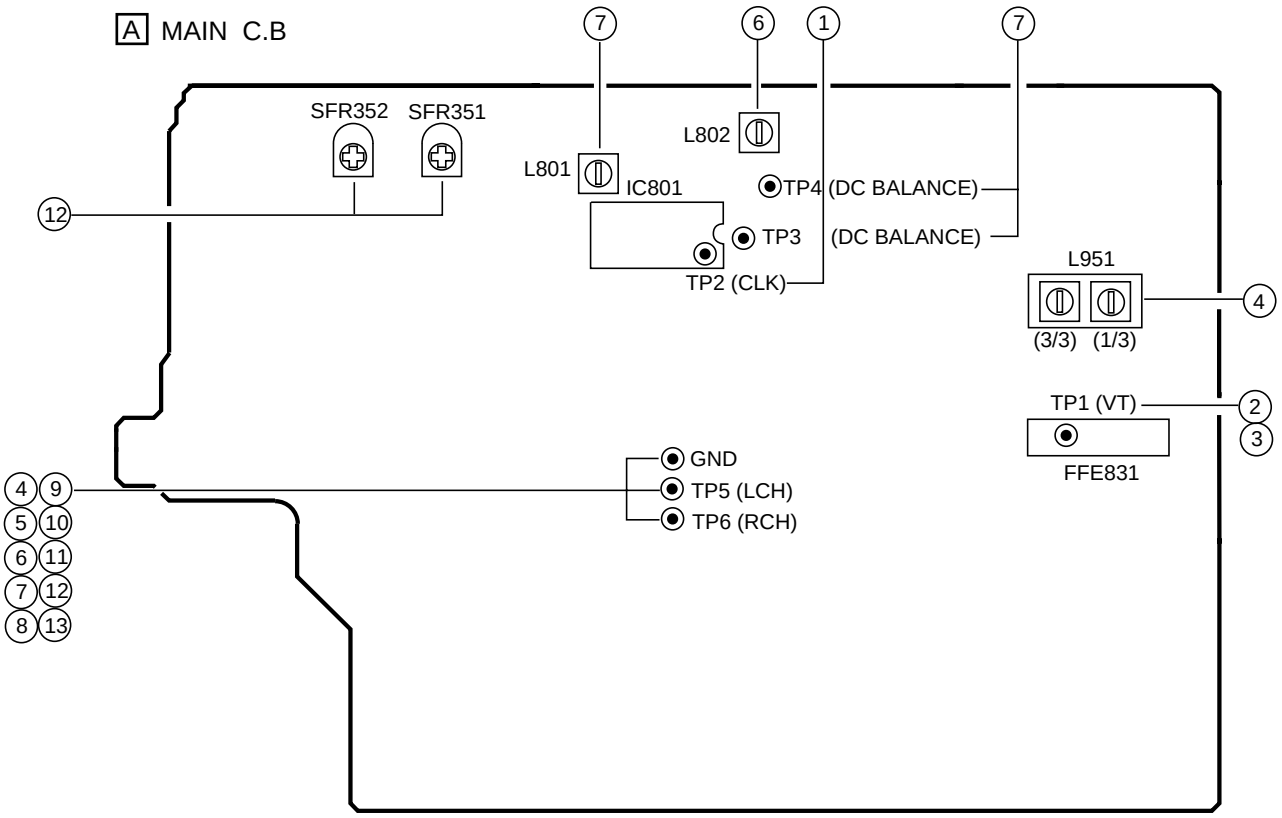


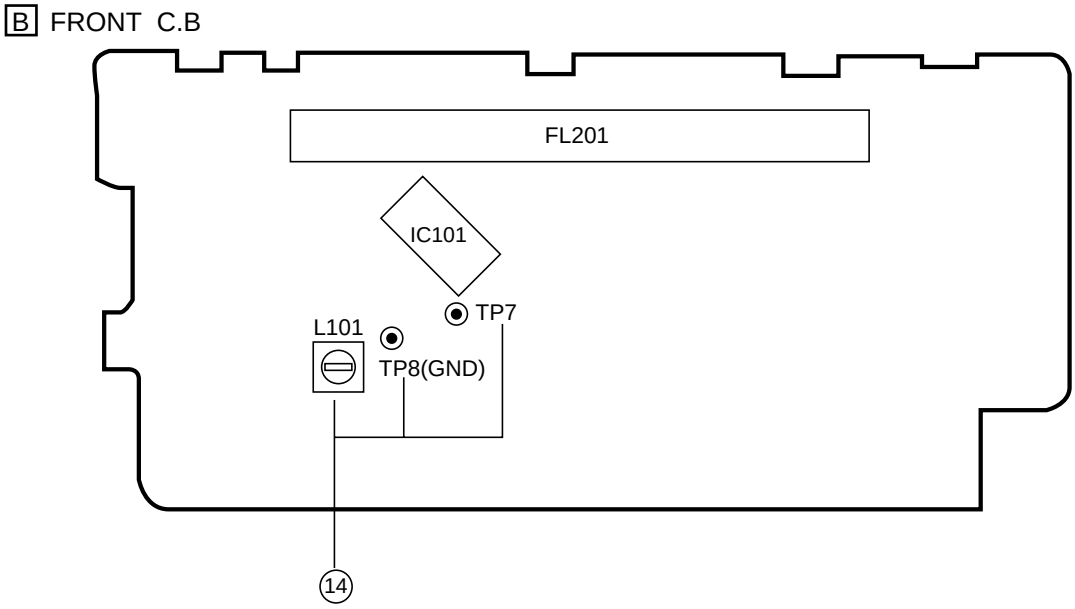
IC DESCRIPTION

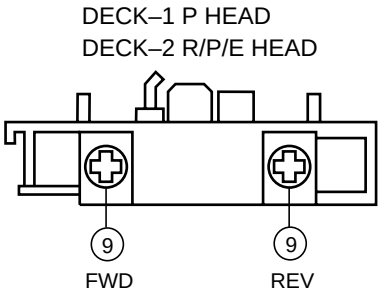
IC, LC876572V-5P63

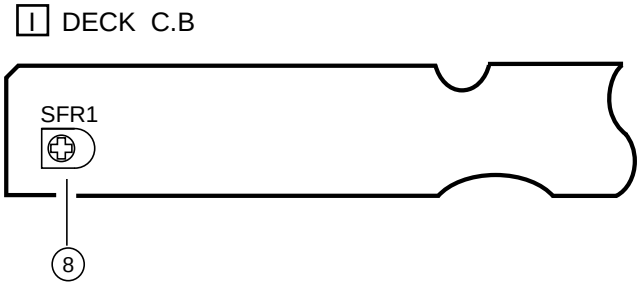
Pin No.	Pin Name	I/O	Description
1	O-CLK	O	CLOCK output for FRONT and MAIN C.B.
2	O-DATA	O	DATA output for FRONT and MAIN C.B.
3	O-STB(M)	O	Strobe output for MAIN C.B.
4	O-POWER	O	System power ON/OFF output.
5	O-STB(SHIFT)	O	Strobe output for shift register.
6	O-$\overline{\text{RYM-CS}}$	O	Chip select output for RHYTHM IC.
7	O-PLL-CE	O	Chip enable output for PLL.
8	I-STEREO	I	Stereo detect input.
9	O-$\overline{\text{CLK SHIFT}}$	O	Tuner clock shift output (active L).
10	I-$\overline{\text{HP-MUTE}}$	I	Head phones connect detect input.
11	$\overline{\text{RESET}}$	I	Reset input for MICON.
12	I-DISH	I	CD turntable photo sensor input.
13	I-SPEANA	I	Spectrum analyzer level AD input.
14	VSS1	–	Connected to GND.
15	CF1	–	To oscillator circuit.
16	CF2	–	To oscillator circuit.
17	VDD1	–	Power supply.
18	I-HOLD	I	HOLD input .
19	I-KEY1	I	Key-1 AD input.
20	I-KEY2	I	Key-2 AD input.
21	I-KEY3	I	Key-3 AD input.
22	I-CDSW	I	CD mechanical switch input.
23	I-RTVR	I	Rotary encoder AD input for VOLUME.
24	I-JOG	I	Rotary encoder AD input for MULTI JOG.
25	I-MIC	I	MIC input for AUTO VOCAL FADER.
26	I-$\overline{\text{MS}}$	I	DECK MS detect input.
27	I-TM-BASE	I	Standard time input (8Hz).
28	I-WRQ	I	CD WRQ input.
29	I-$\overline{\text{RMC}}$	I	System remote controller input.
30 ~ 42	G13 ~ G1	O	FL grid output (G13 ~ G1).
43 ~ 45	P35 ~ P33	O	FL segment output (P35 ~ P33).
46	VDD3	–	Power supply.
47	P32/SPEANA-A	O	FL segment output (P32)/Spectrum analyzer band change output (A).
48	P31/SPEANA-B	O	FL segment output (P31)/Spectrum analyzer band change output (B).
49	P30/SPEANA-C	O	FL segment output (P30)/Spectrum analyzer band change output (C).
50	P29/$\overline{\text{BEAT-M}}$	O/I	FL segment output (P29)/BEAT MASTER diode input.
51	-VP	–	Connected to -VFL .
52	P28/AM-ST	O/I	FL segment output (P28)/AM-STEREO diode input (Not used).
53	P27/LW	O/I	FL segment output (P27)/LW diode input (Not used).
54	P26/SW	O/I	FL segment output (P26)/SW diode input (Not used).
55	P25/FM1	O/I	FL segment output (P25)/FM1diode input (Not used).
56	P24/CASINO DEMO	O/I	FL segment output (P24)/Initial CASINO DEMO diode input (Not used).

Pin No.	Pin Name	I/O	Description
57	P23/$\overline{\text{ECO MODE}}$	O/I	FL segment output (P23)/Initial ECO MODE diode input (Not used).
58	P22/$\overline{\text{DSP}}$	O/I	FL segment output (P22)/DSP diode input (Not used).
59	P21/PRO/5.1	O/I	FL segment output (P21)/PRO-LOGIC 5.1CH diode input.
60	P20/KEY-CON	O/I	FL segment output (P20)/KEY CONTROL diode input (Not used).
61	P19/DOLBY	O/I	FL segment output (P19)/DECK DOLBY diode input (Not used).
62	P18/PRO	O/I	FL segment output (P18)/PROLOGIC diode input (Not used).
63	P17/AM10K	O/I	FL segment output (P17)/AM10K change diode input.
64	P16/$\overline{\text{CST2}}$	O/I	FL segment output (P16)/DECK 2 cassette detect SW input.
65	P15/$\overline{\text{REB}}$	O/I	FL segment output (P15)/DECK side B record permission SW input.
66	P14/$\overline{\text{CAM2}}$	O/I	FL segment output (P14)/DECK 2 CAM SW input.
67	P13/AUTO1	O/I	FL segment output (P13)/DECK 1 auto stop input.
68	P12/AUTO2	O/I	FL segment output (P12)/DECK 2 auto stop input.
69	P11/$\overline{\text{CAM1}}$	O/I	FL segment output (P11)/DECK 1 CAM SW input.
70	P10/$\overline{\text{CST1}}$	O/I	FL segment output (P10)/DECK 1 cassette detect SW input.
71	P9/$\overline{\text{REA}}$	O/I	FL segment output (P9)/DECK side A record permission SW input.
72	VDD4	–	Power supply.
73	P8 /$\overline{\text{AC DEMO}}$	O/I	FL segment output (P8)/DEMO (on the shop) diode input (Not used).
74~80	P7~P1	O	FL segment output (P7~P1).
81	NC	–	Not connected.
82	O-TRAY CLOSE	O	CD tray close output.
83	O-TRAY-OPEN	O	CD tray open output.
84	I-SUBQ	I	CD SUBQ detect input.
85	O-DISH-FWD	O	CD turntable forward revolution output.
86	O-DISH-REV	O	CD turntable reverse revolution output.
87	O-DATA	O	CD data output.
88	$\overline{\text{O-LED-STBY}}$	O	STBY LED on output (STBY LED on during O-POWER OFF).
89	VSS2	–	Connected to GND.
90	VDD2	–	Power supply.
91	$\overline{\text{O-MOTOR}}$	O	DECK motor output.
92	O-MUTE	O	System mute ON/OFF output.
93	O-$\overline{\text{SOL1}}$	O	DECK 1 plunger $\overline{\text{ON}}$/OFF output.
94	O-$\overline{\text{SOL2}}$	O	DECK 2 plunger $\overline{\text{ON}}$/OFF output.
95	I-DRF	I	CD DRF input.
96	I-IFC	I	TUNER IFC input.
97	NC	–	Connected to GND.
98	O-CD CLK	O	CD CLK output.
99	O-CD-CE	O	CD CE output.
100	$\overline{\text{O-KSCAN}}$	O	Key scan timing output.


A MAIN C.B
7
6
1
7
SFR352
SFR351
L802
L801
IC801
TP4 (DC BALANCE)
12
TP3
(DC BALANCE)
TP2 (CLK)
L951
4
(3/3)
(1/3)
TP1 (VT)
2
3
FFE831
GND
TP5 (LCH)
TP6 (RCH)
4
9
5
10
6
11
7
12
8
13


B FRONT C.B
FL201
IC101
TP7
L101
TP8(GND)
14


DECK–1 P HEAD
DECK–2 R/P/E HEAD
9
9
FWD
REV


I DECK C.B
SFR1
8

< TUNER SECTION >

1. Clock frequency Check
   Settings : • Test point : TP2 (CLK)
   Method : Set to AM 1710kHz and check that the test point is 2160kHz ± 45Hz.

2. AM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to AM 1710kHz, 530kHz and check that the test point is less than 8.5V (1710kHz) and more than 0.6V (530kHz).

3. FM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

4. AM Tracking Adjustment
   Settings : • Test point : TP5(Lch), TP6(Rch)
   • Adjustment location :
   L951(1/3) 1000kHz
   Method : Set to AM 1000kHz and adjust L951(1/3) to MAX.

5. FM Tracking Check
   Settings : • Test point : TP5(Lch), TP6(Rch)
   Method : Set to FM 98.0MHz and check that the test point is less than 9dBμV.

6. AM IF Adjustment
   Settings : • Test point : TP5(Lch), TP6(Rch)
   • Adjustment location :
   L802 ..... 450kHz

7. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC Balance)
   : TP5(Lch), TP6(Rch) (Distortion)
   • Adjustment location : L801
   • Input level : 60dBμV
   Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V ± 300mV.
   Next, check that the distortion is minimum.

< DECK SECTION >

8. Tape Speed Adjustment (DECK 2)
   Settings : • Test tape : TTA–100
   • Test point : TP5(Lch), TP6(Rch)
   • Adjustment location : SFR1
   Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz (FWD) and ±45Hz (REV) with respect to forward speed.

9. Head Azimuth Adjustment (DECK 1, DECK 2)
   Settings : • Test tape : TTA–300
   • Test point : TP5(Lch), TP6(Rch)
   • Adjustment location : Head azimuth adjustment screw
   Method : Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

10. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–300
    • Test point :TP5(Lch), TP6(Rch)
    Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is 0dB ± 3dB.

11. PB Sensitivity Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
    • Test point : TP5(Lch), TP6(Rch)
    Method : Play back the test tape and check that the output level of the test point is 280mV ± 3dB.

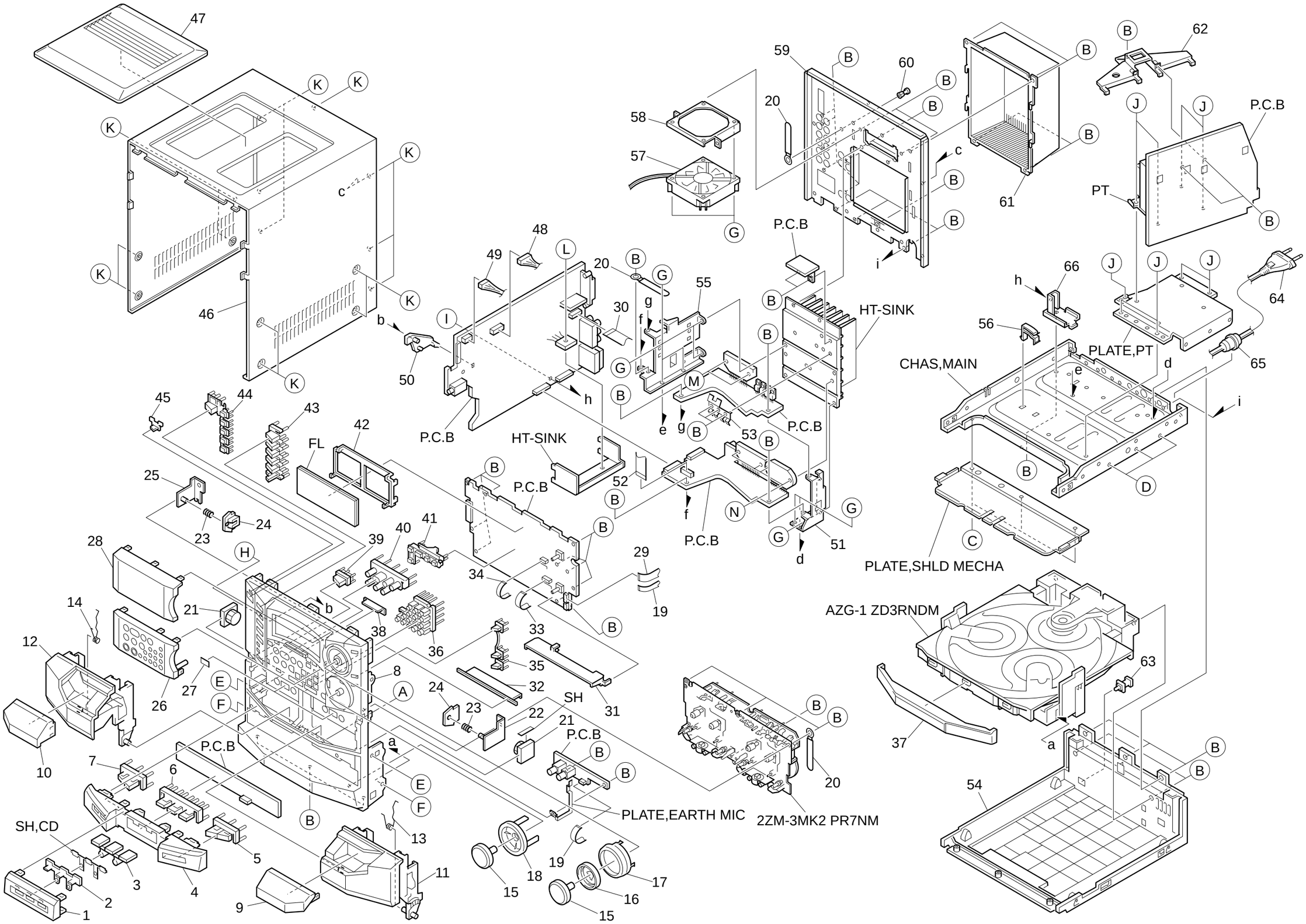
12. REC/PB Frequency Response Adjustment (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP5(Lch), TP6(Rch)
    • Input signal : 1kHz / 10kHz (LINE IN)
    • Adjustment location : SFR351 (Lch)
    SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP5, TP6 becomes 28mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB ± 1dB with respect to that of the 1kHz signal.

13. REC/PB Sensitivity Check (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP5(Lch), TP6(Rch)
    • Input signal : 1kHz (LINE IN)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP5, TP6 becomes 280mV. Record and play back the 1kHz signals and check that the output is –0.5dB ± 2.5dB.

< FRONT SECTION >

14. μ-CON OSC Adjustment
    Settings : • Test point : TP7 and TP8 (GND)
    • Adjustment location : L101
    Method : Insert AC plug while pressing TUNER function key. Adjust L101 so that the frequency at the test point is 208.80Hz ± 0.2Hz.

MECHANICAL EXPLODED VIEW 1 / 1



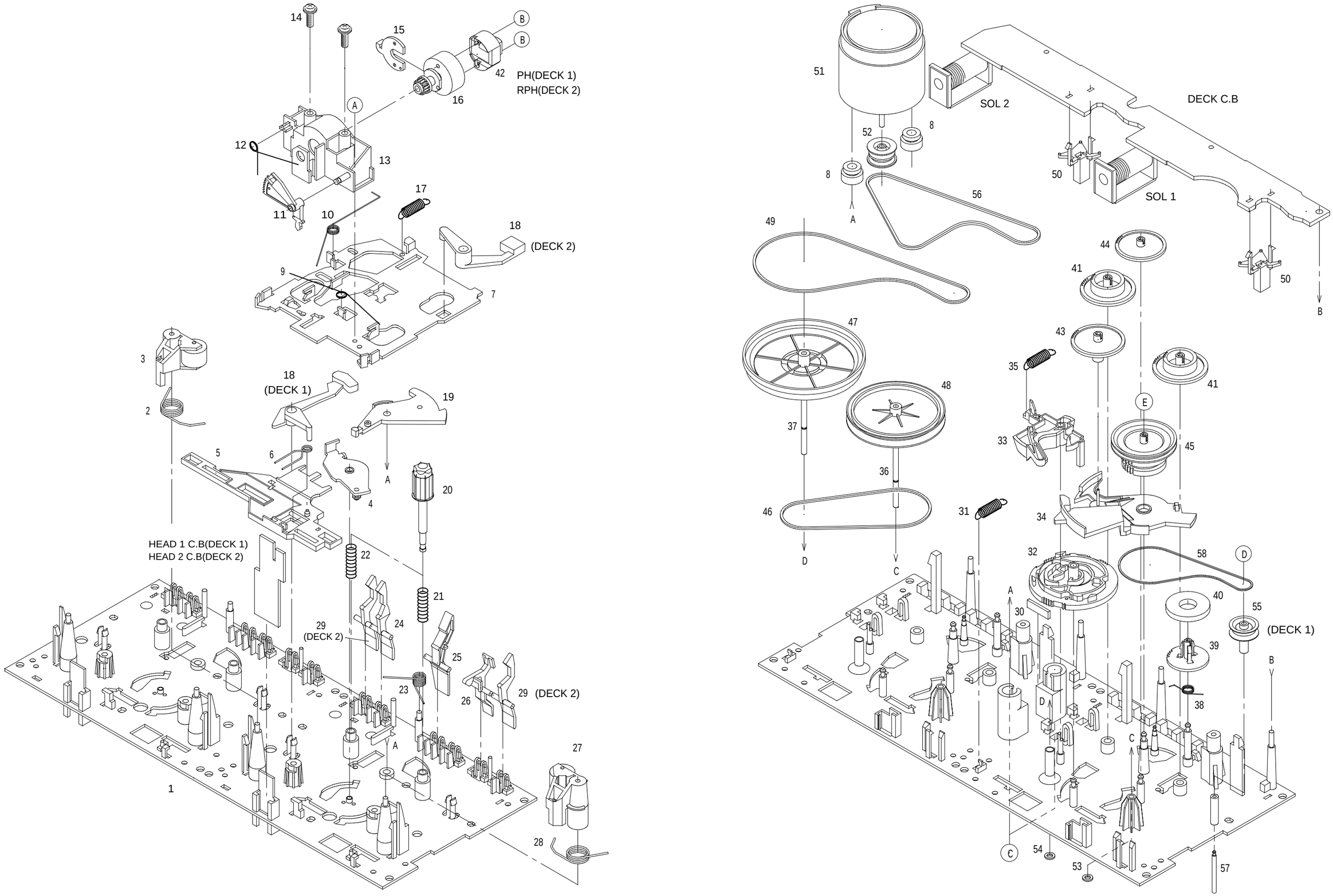
MECHANICAL PART LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NF6-010-010		PANEL,DIRECT
2	8A-NF6-044-010		REFLECTOR,CD
3	8A-NF6-205-010		GUIDE,CD
4	8A-NF6-009-010		PANEL,CD
5	8A-NF6-037-010		KEY,CD OPEN
6	8A-NF6-035-010		KEY,CD DIRECT
7	8A-NF6-036-010		KEY,CD EDIT
8	8A-NFT-001-010		CABI,FR U
9	8A-NF6-019-010		WINDOW,CASS 2
10	8A-NF6-018-010		WINDOW,CASS 1
11	8A-NF6-007-010		BOX,CASS 2
12	8A-NF6-006-010		BOX,CASS 1
13	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
14	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
15	8A-NF6-030-010		KNOB,RTRY JOG
16	8A-NF6-040-010		REFLECTOR,VOL
17	8A-NF6-041-010		RING,VOL
18	8A-NF6-029-010		KEY,GEQ
19	88-905-281-110		FF-CABLE, 5P 1.25 280MM
20	87-064-185-010		HLDR,WIRE PCV 0.5
21	8Z-NF6-210-010		DMPR,150 N
22	87-NF4-217-110		HLDR,LOCK 2
23	86-NF9-224-010		SPR-C,LOCK
24	82-NF5-229-010		PLATE,LOCK
25	87-NF4-216-010		HLDR,LOCK 1
26	8A-NFT-016-010		PANEL,FR U 7CH
27	81-532-080-010		LABEL, CASS. COMPT
28	8A-NFT-003-010		WINDOW,DISPLAY U
29	88-913-521-110		FF-CABLE,13P 1.25 520MM
30	88-906-621-110		FF-CABLE,6P 1.25 620MM
31	8A-NF6-204-010		GUIDE,DECK
32	8A-NF6-039-010		REFLECTOR,DECK
33	88-915-111-110		FF-CABLE,15P 1.25
34	88-907-421-110		FF-CABLE,7P 1.25 420MM
35	8A-NF6-022-010		KEY,ECHO
36	8A-NF6-047-010		KEY,T-BASS U
37	8A-NF6-008-010		PANEL,TRAY
38	8A-NF6-038-010		REFLECTOR,FL
39	8A-NFT-007-010		KEY,ASSY PRO
40	8A-NF6-026-010		KEY,ASSY OPE
41	8A-NF6-203-010		GUIDE,OPE
42	8A-NF6-201-010		GUIDE,FL
43	8A-NF6-023-010		KEY,ASSY FUN
44	8A-NF6-045-010		KEY,ASSY POWER
45	8A-NF6-042-010		REFLECTOR,ECO
46	8A-NF6-004-010		CABI,STEEL
47	8A-NF6-005-010		PANEL,TOP
48	87-NF6-616-010		CONN ASSY,8P RPB
49	87-NF6-615-010		CONN ASSY,3P PB
50	8A-NF8-206-010		HLDR,PWB M
51	8A-NF6-214-010		HLDR,HT-SINK R
52	88-910-151-110		FF-CABLE, 10P 1.25 150MM
53	8A-NF6-210-010		HLDR,IC6
54	8A-NF6-003-010		CABI,BOTTOM
55	8A-NF6-213-010		HLDR,HT-SINK L
56	87-NF4-221-010		HLDR,CABLE
57	87-A91-711-010		FAN, 3110GL-B4W-B34-H02 -400MM
58	8A-NF6-219-010		HLDR,FAN
59	8A-NFT-011-010		PANEL,REAR U
60	87-084-077-010		NYLON RIVET, 3.5-4.5
61	8A-NFT-022-010		COVER, REAR USM
62	8A-NF6-228-010		HLDR,PWB PT 96-75
63	84-ZG1-245-210		CAP,OPTICAL
⚠ 64	87-A80-110-010		AC CORD ASSY,U SPT-2W
65	87-085-189-010		BUSHING, CORD (U)
66	8A-NF7-209-010		HLDR,PWB-M BTM
A	87-067-758-010		BVT2+3-12 W/O SLOT
B	87-067-703-010		TAPPING SCREW, BVT2+3-10
C	87-067-688-010		BVTT+3-6
D	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
E	87-591-094-410		TAPPING SCREW, QIT+3-6
F	87-721-097-410		QT2+3-12 GLD
G	87-067-579-010		TAPPING SCREW, BVT2+3-8
H	87-723-096-410		QT2+3-10W/O SLOT BL
I	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
J	87-067-975-010		S-SCREW,IT+4-8
K	87-B10-091-010		UTT2+3-10 W/O BLK
L	87-067-001-010		S-SCREW,BVWWST2+3-12 W/O SL
M	87-067-581-010		TAPPING SCREW, BVT2+3-15

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1



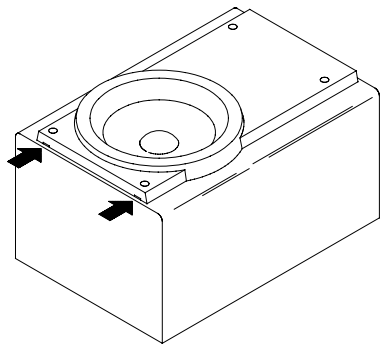
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-619		CHAS ASSY,M2
2	82-ZM1-258-219		SPR-T,PINCH L
3	82-ZM1-341-219		LVR ASSY,PINCH L2
4	82-ZM1-333-110		PLATE,LINK 2
5	82-ZM1-266-310		LVR,DIR
6	82-ZM1-214-919		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM3-353-010		SPR-T,HEAD
13	82-ZM1-207-919		GUIDE,TAPE
14	86-ZM4-206-110		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-319		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-419		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-410		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-219		LVR ASSY,PINCH R2
28	82-ZM1-259-219		SPR-T,PINCH R
29	82-ZM1-240-119		LVR,REC (DECK 2)
30	82-ZM3-340-010		SH,BELT D2
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-310		GEAR,CAM M2
33	82-ZM1-227-319		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-310		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-519		GEAR,REEL
42	87-A91-196-010		HEAD,PH KP9142
42	87-A91-195-010		HEAD,RPH KC9142
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-110		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-310		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-110		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-110		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-410		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-210		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-310		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-342-010		BELT,SBU MOT 2
57	82-ZM3-339-110		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-110		V+1.6-7
C	82-ZM3-318-110		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

SPEAKER DISASSEMBLY INSTRUCTIONS

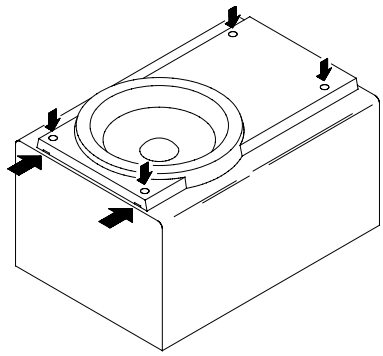
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



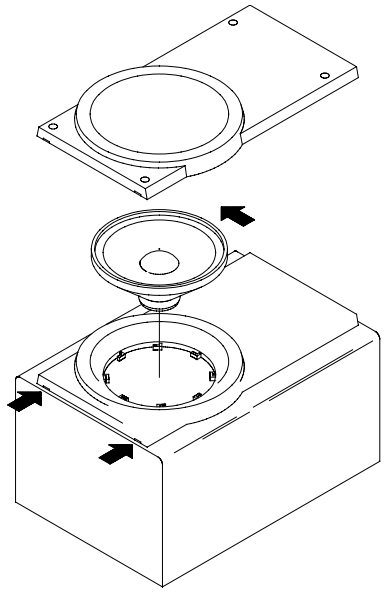
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

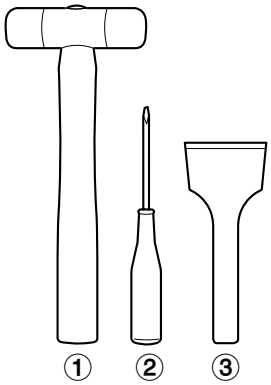


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

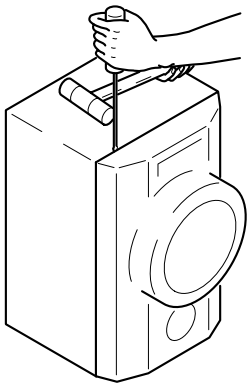


Fig-1

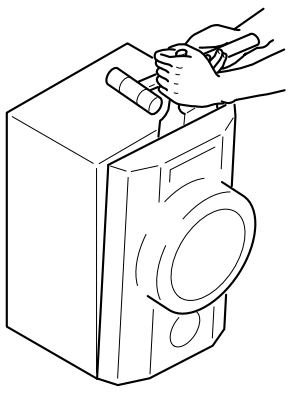


Fig-2

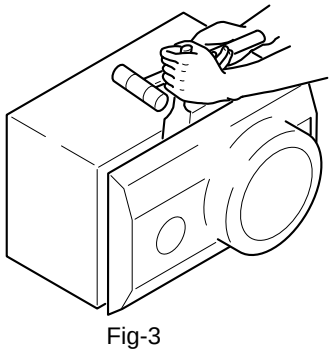


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST SX-WNAJ86 (YUSL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NS2-001-010		PANEL,FR
2	8A-NS2-002-010		PANEL,TW R
3	8A-NS2-003-010		PANEL,TW L
4	8A-NS2-004-010		PANEL,DUCT
5	8A-NS2-013-010		PANEL,DUCT RING
6	8A-NS2-008-010		PROTECTOR,TW
7	8A-NS2-009-010		GRILLE,FRAME ASSY
8	8A-NS6-604-010		SPKR,W 200
9	8A-NS0-604-010		SPKR,M 120
10	88-NSK-610-010		SPKR,CERAMIC ASSY
11	88-NS5-610-010		CORD,SPKR
12	88-NS5-611-010		CORD,SPKR B/L

SPEAKER PARTS LIST SX-C605 (YUSTNC, YUSTNL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS3-001-010		PANEL,FR ST
2	87-YS3-002-010		PANEL,REAR ST
3	81-VSA-009-010		CORD,BUSH
4	87-YS3-003-010		GRILLE,FRAME ASSY
5	83-NSM-010-010		SPKR,CORD
6	87-YS7-602-010		SPKR,100<YUSTNC>
6	87-YS7-604-010		SPKR,100<YUSTNL>
7	87-YS7-903-010		IB,YU(ESF)O<YUSTNC>

SPEAKER PARTS LIST SX-R275 (YUSTNC, YUSTNL, YUSTNP)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS1-001-010		CABI,REAR
2	87-YS1-004-010		GRILLE,FRAME ASSY
3	81-VSA-009-010		CORD,BUSH
4	87-010-384-010		CAP,E 100-25 M SME
5	87-YS6-002-010		SPKR,CORD Y
6	87-YS6-601-010		SPKR, 100
7	87-YS6-903-010		IB,YU(ESF)O<YUSTNC>
7	87-YS6-904-010		IB,YU(ESF)P<YUSTNP>
7	87-YS6-913-010		IB,YU(ESF)T<YUSTNL>

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NFT-903-010		IB,U(ESF)M
2	8Z-NFV-702-010		RC UNIT,RC-ZAS05
3	87-006-225-010		AM LOOP ANT NC2
4	87-043-115-010		ANT,FEEDER FM

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